

Zero-G (External)

Installation Instructions

ZERO-G DISCLAIMER



Failure to comply with the following steps will result in a void of the manufacturer's warranty. The dealer/installer will be responsible for all costs associated with failure to comply, including replacement parts, and/or additional on-site visits needed for repair work.

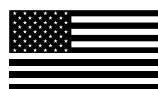
- Do not use a knife to cut foam/wrapping, you may cut cables.
- Due to the complexity of Zero-G, please scan the QR code to review the installation video before proceeding:
- A minimum of 12" of drop must be met to ensure no mechanical failures.
- Please use the supplied Moab for initial setup before introducing 3rd party control systems.
- Before operating, please inspect helix & wing cable pulleys didn't lose tension during transit.
- Please contact SI support at (512) 832-6939 w/ any install related questions prior to installation or scan the QR code to get more details:
- Leveling the Zero G Case and Wing/Lower Tube Assembly: These pieces MUST be level and parallel within 1/16th of an inch. Failure to accurately level these two pieces can cause the screen cables to become unstable and fray over time.



Support page
QR code



INSTALLERS: PLEASE LEAVE THIS MANUAL WITH THE OWNER.





Scan the QR code to view the SI warranty for this product.



Please use this QR Code to access the updated installation instructions and related documents.

Technical Support: 512.832.6939
Hours of Support: 7:30am – 5pm CST

screeninnovations.com
screensupport@screeninnovations.com

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BEFORE PROCEEDING



The placement from bottom to the screen should be between 36" (91cm) - 42" (106cm).
Check the projector manual for Projector placement.



Read the instructions in their entirety before proceeding. Actions contrary to the instructions invalidate the warranty and may result in serious damage and/or injury.

INSTALLER:

- Blocking is required. The ceiling or wall used for fixture installation must be able to support 300 lbs or more. Failure to properly secure the screen may result in injury and/or damage.
- Electrical work should be performed using appropriate electrical codes and regulation, by a licensed electrical professional.
- Before running cables in walls or ceilings see controls section on pages 14 and 17 for control cable requirements.
- Before removing the screen from the box, check for damage and to make sure all parts are included.
- Do not use any sharp blades when opening the screen packaging. Open by hand.
- Do not pull on the sides, crease, or fold the screen. The screen material is very delicate.
- Care in mounting and correct operation will result in long and satisfactory service from the SI screen.
- The screen should be level when installed. Always use a carpenter's level.
- Nothing should be fastened to any part of the screen assembly.

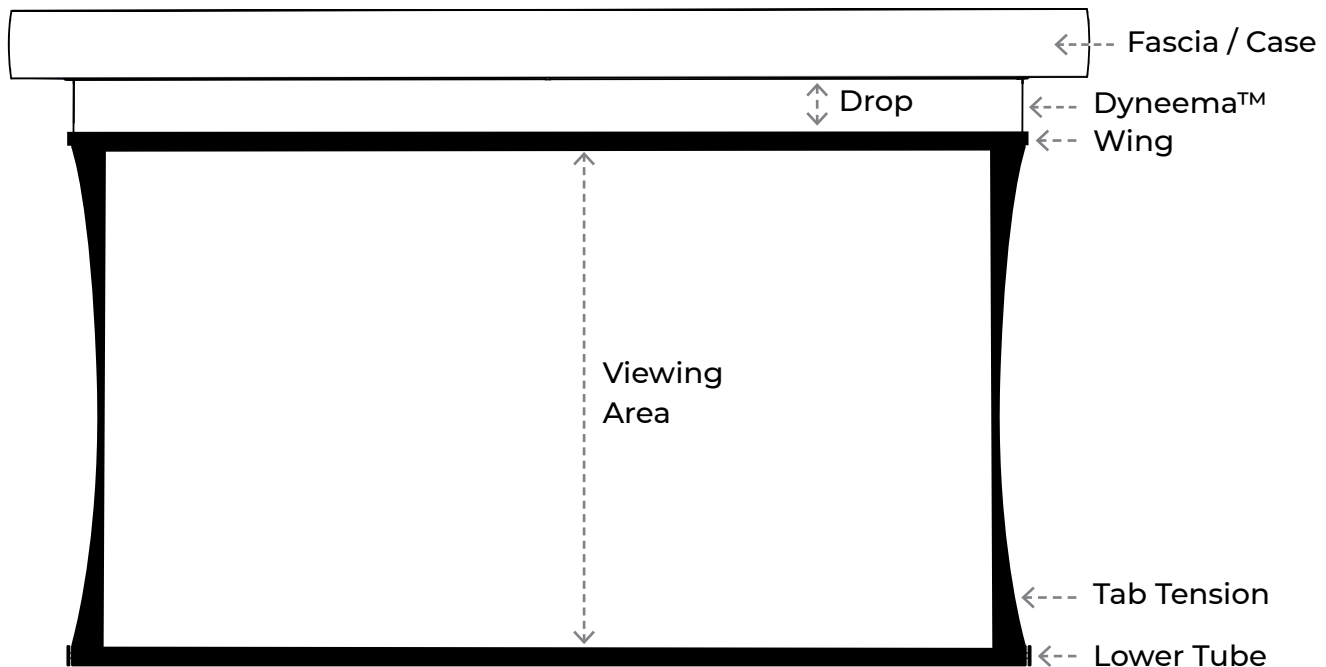
NOTE: The screen has been thoroughly inspected and tested at factory and found to be operating properly prior to shipment.

END USER:

- To prevent damage, the operating and maintenance of the screen should be performed by experienced professionals.
- This is a finished product. Do not write or draw on the surface.
- Do not put anything near or under the screen that would come in contact or impede the normal operation of the screen when deployed.
- Damage to the screen can result if an object prevents the screen from fully deploying.

PRODUCT OVERVIEW

It is important to familiarize yourself with the product and its parts prior to installation. Please refer to the diagram and definitions below.



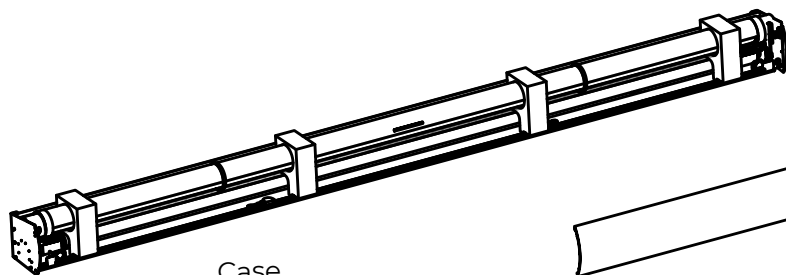
1. Case - The case is the enclosure of the screen that houses the upper tube assembly, doors, controls, and the lower tube assembly when the screen is retracted.
2. Fascia - The fascia is the decorative cover that is installed on the front of the case.
3. Drop - The distance between the bottom of the case and the top of the wing. Do not exceed the minimum(12") / maximum drop as specified for your screen.
4. Dyneema: the nylon cords which suspend the lower tube assembly from the case when the screen is deployed.
5. Wing: the upper part of the lower tube assembly which holds the top of the screen material and nests with the lower tube when the screen is retracted.
6. Viewing Area: the area of the screen material onto which an image is projected.
7. Tab Tension: the small tabs and string on the outer edges of the screen material that maintain the flatness of the screen.
8. Lowe Tube: the lower part of the lower tube assembly which holds the bottom of the screen material and nests with the wing when the screen is retracted.

PARTS IN THE BOX

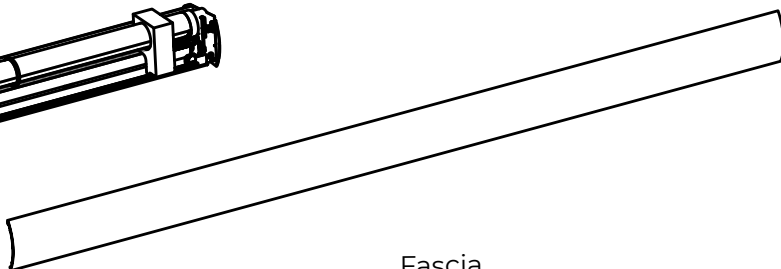


Installation requires three or more people. The product weighs up to 225 lbs. Please use safe lifting and rigging techniques.

External Mount Case



Case

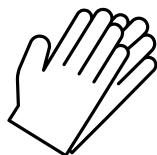


Fascia

Mounting Bracket Options



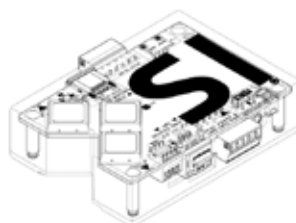
16 x - 24 x
Wood Screws



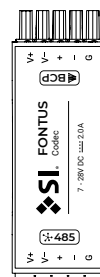
2 x Hand
Gloves



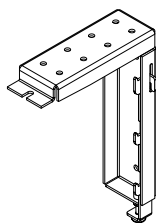
1 x IEC Cable - 12'



1 x Moab



Fontus
(comes pre-installed)



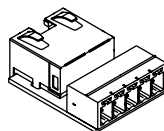
2 x - 3 x
L - Brackets



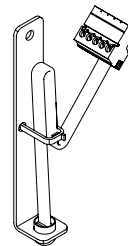
1 x IR
Remote



2 x 35mm
Mono Plug



1 x Spike
(#301989)



1 x IR Eye



1 x Thumb
Screw

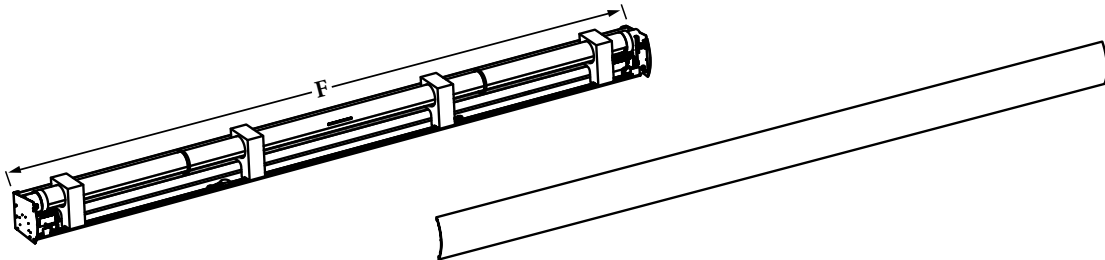
CASE INSTALLATION

1

Set fascia aside and out of the way of the installation location. Leave the foam around the tube inside the case in place. Remove all other foam and packaging materials. Measure full length of the case (F).



Blocking required. The ceiling or wall used for fixture installation must be able to support 300 lbs or more. Failure to properly secure the screen may result in injury and/or damage.



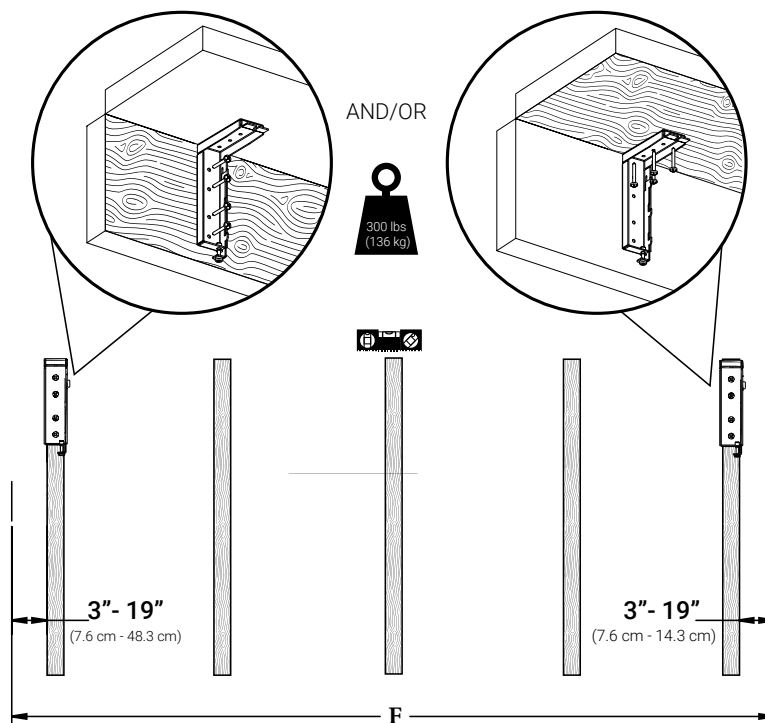
2

Level the brackets to within 1/8" over 10' using the case length (F).

Note that the bracket screws provide 1/8" additional adjustment after they have been mounted. Install the brackets so that they will be 3" - 19" away from the edge of the case on both sides.



Failure to properly level the mounting brackets may create issues with the screen over time, which could damage the screen material.

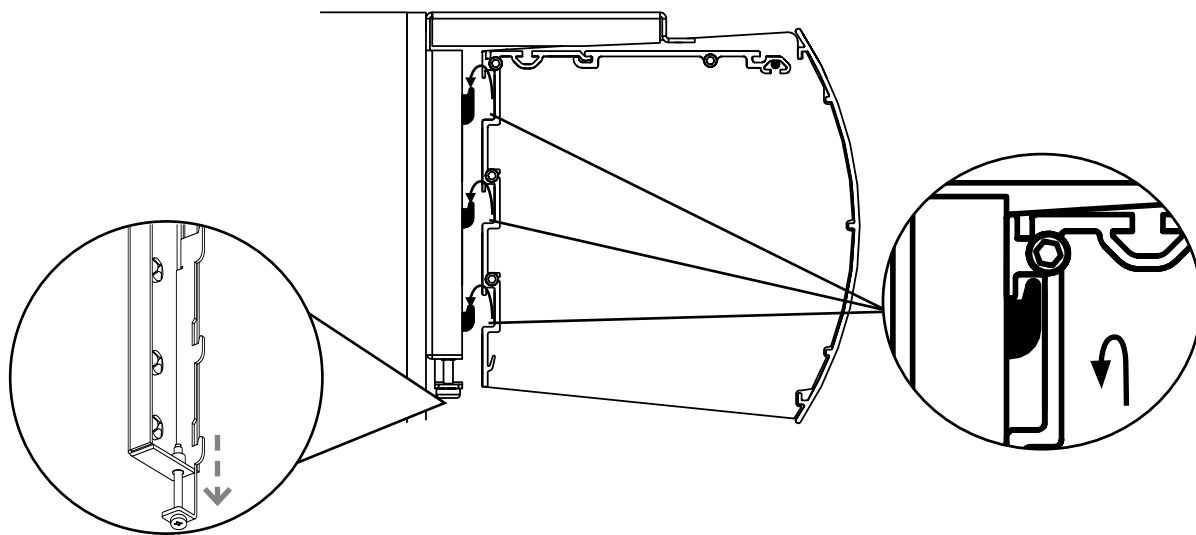


CASE INSTALLATION

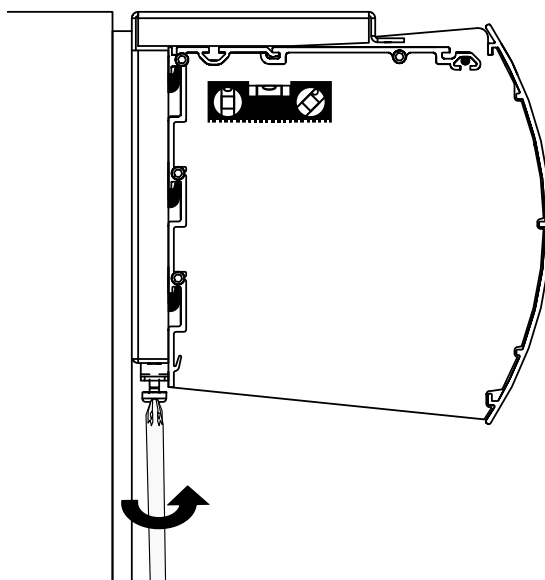


Installation requires three or more people. The product weighs up to 225 lbs.
Please use safe lifting and rigging techniques.

- 3** Make sure bracket screws are backed out all the way before putting the screen in place. Hook the bracket into all 3 grooves in the case.



- 4** Tighten the screws to lock in place. Then check to make sure the screen is level to within 1/8" over 10 ft. You can make up to 1/8" adjustment with bracket screws.



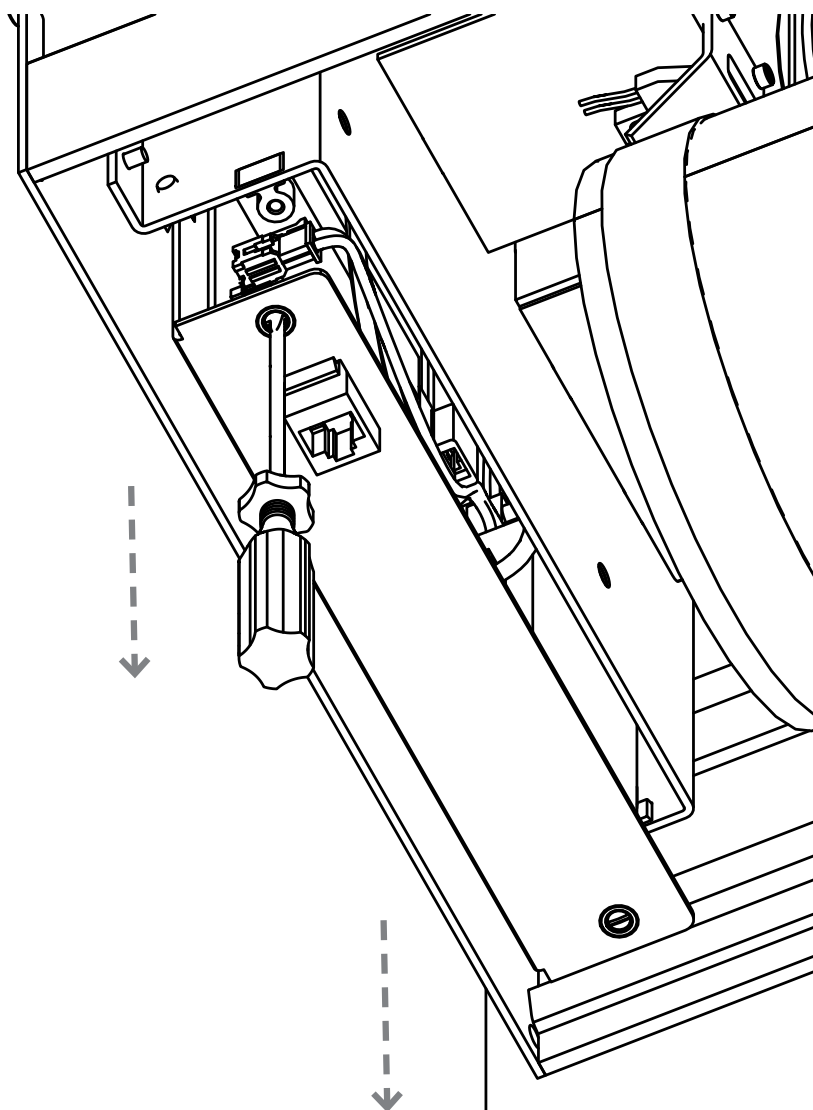
POWER & CONTROLS

1

Open the tray. Unscrew and pull down the control center carefully ensuring none of the cables or motherboard become damaged. **If you feel resistance do not yank.**



Do not open the control center with the circuit breaker on.

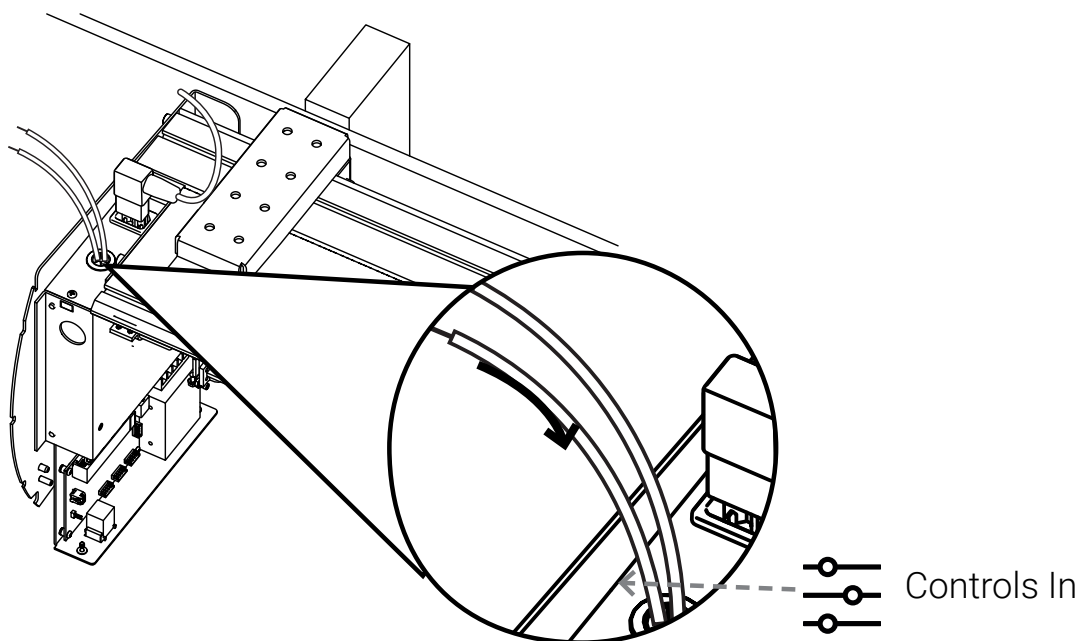


POWER & CONTROLS

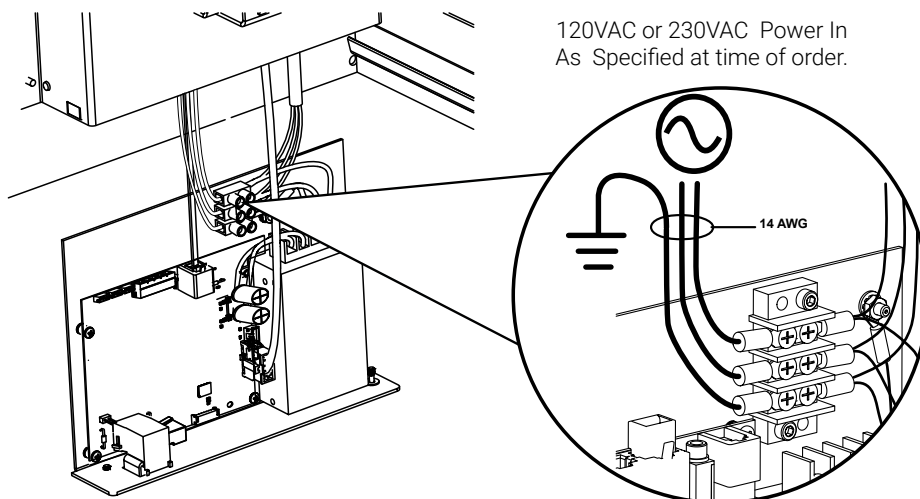
- 2 Pass the control cables through the appropriate opening in the case, and connect your AC power cable.



To be installed and/or used in accordance with the appropriate electrical codes and regulations by a licensed electrical professional. Do not connect power with the circuit breaker on.



- 3 Securely connect power to the terminal block on the control center. It is recommended to crimp the provided spade connectors to the incoming power wires.



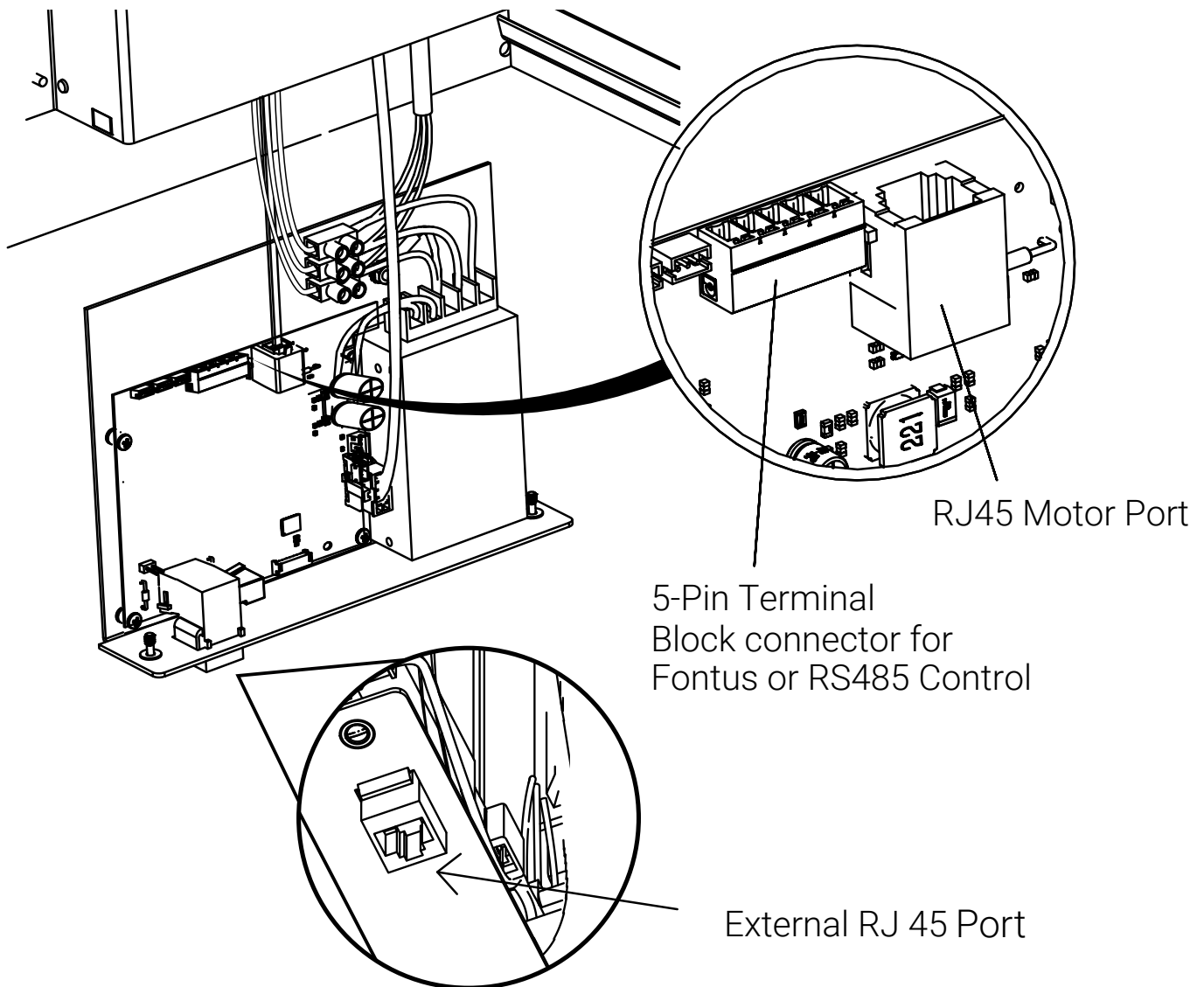
POWER & CONTROLS

4

Internal RJ45 port is for the motor only. Internal 5-Pin Terminal Block Connector and External auxillary RJ45 can be used for control.



To be installed and/or used in accordance with the appropriate electrical codes and regulations by a licensed electrical professional. Do not connect power with the circuit breaker on.

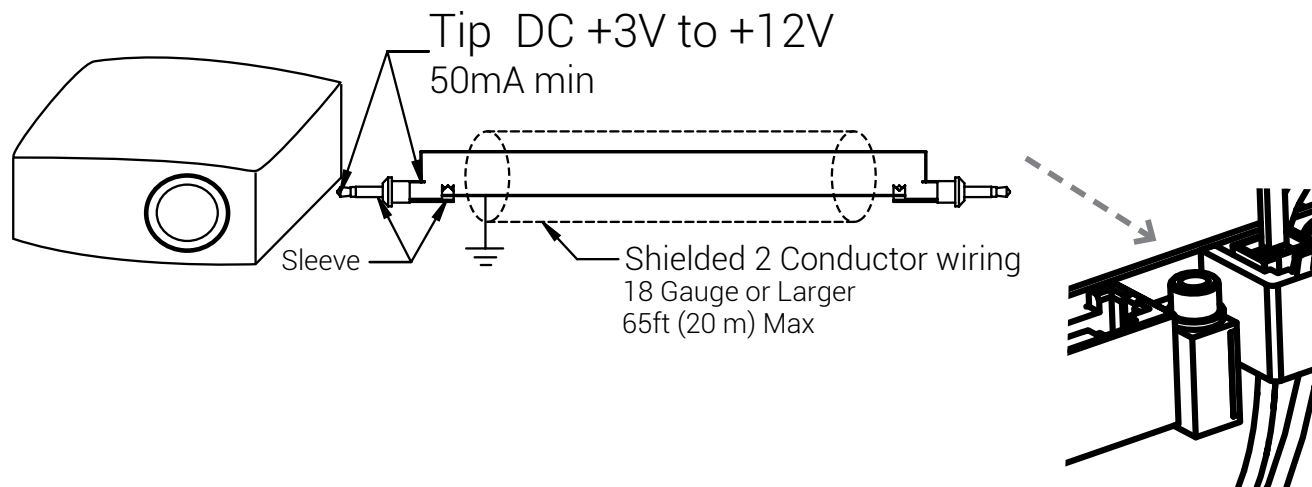


POWER & CONTROLS

Low Voltage Trigger (Optional)

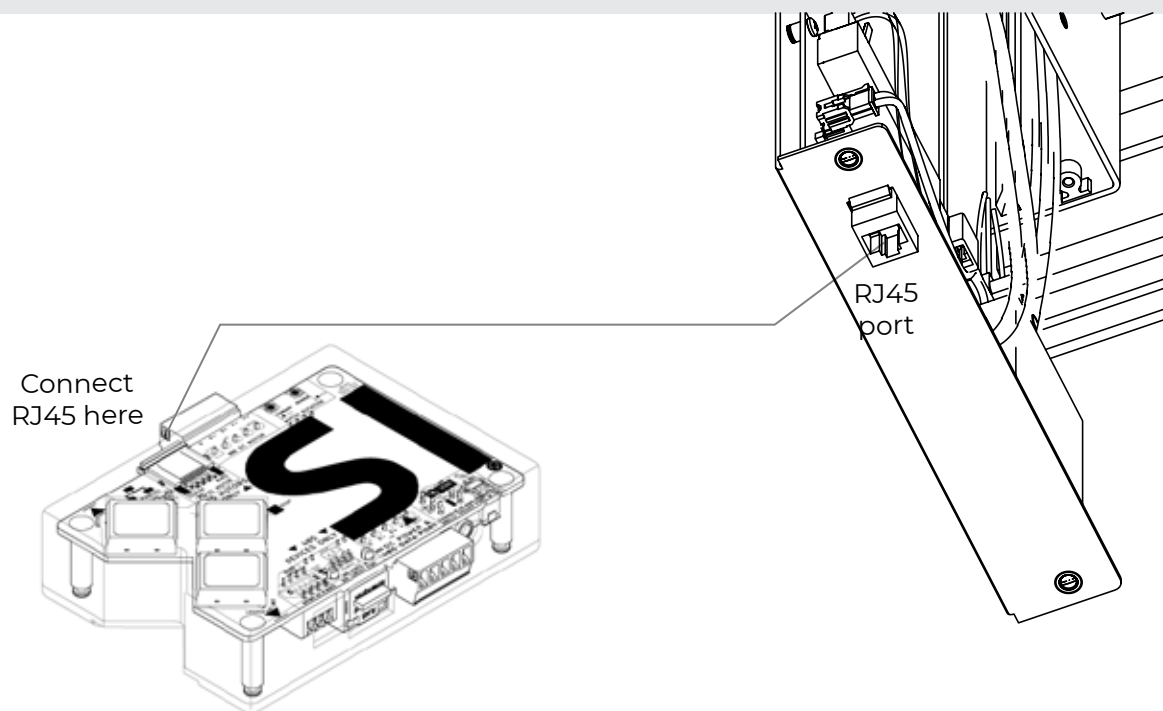
1

Some projectors may have a low-voltage trigger that will allow your screen to drop when it is turned on. Installer must supply conductor wire in the length and guage needed..



2

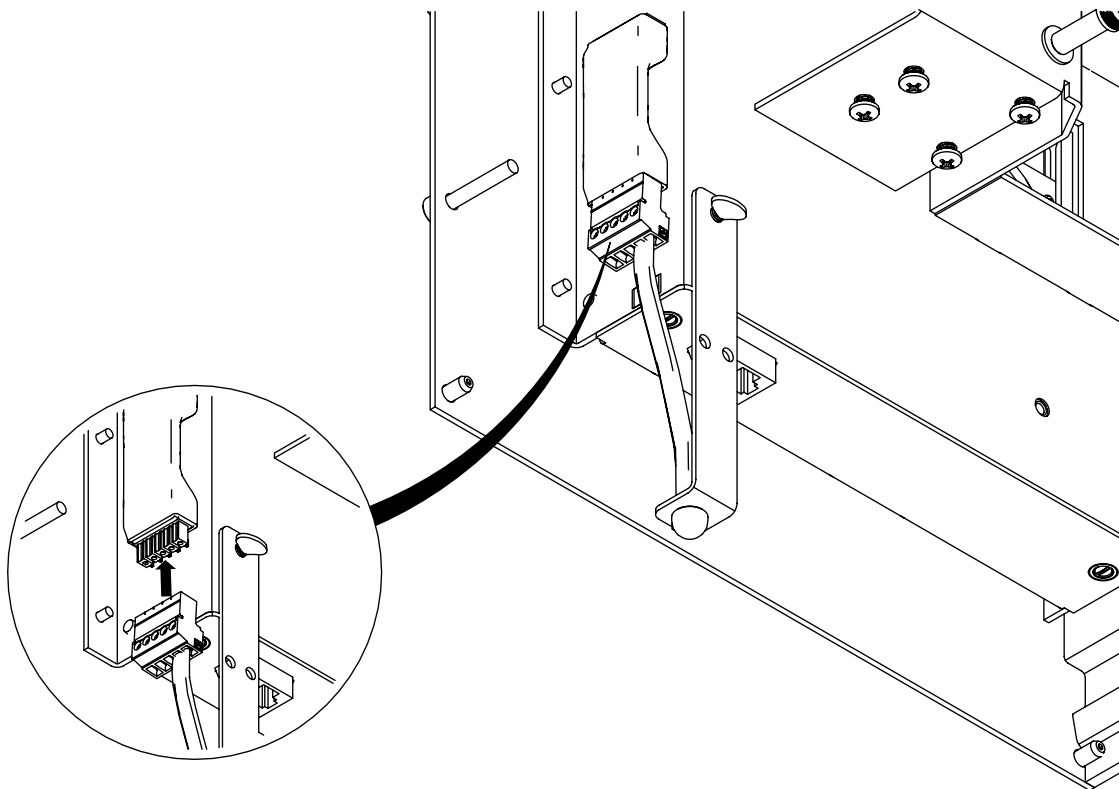
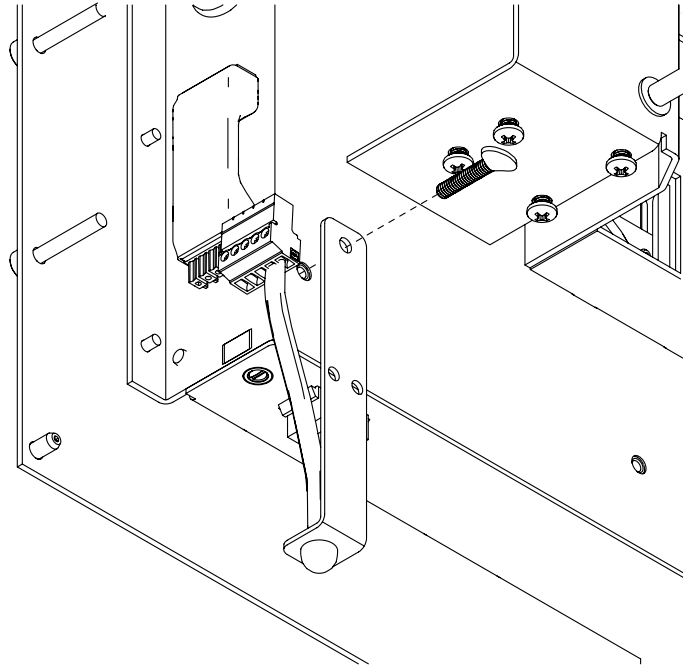
Use the supplied Moab for all set-up procedures.



POWER & CONTROLS

IR Remote (Optional)

- 3** Connect the IR eye assembly to the case with the thumb screw, then plug into the pre-installed Fontus if not already installed.



POWER & CONTROLS

IR Remote (Optional)

IR Remote Use

- If the IR remote is held down continuously as the screen is moving there is a chance that the screen can stop in-between limits. If this happens simply send another IR signal in the direction it was going to continue its movement.
- If a control system is using an IR blaster to control this screen, make sure to limit the period where it blasts the signal one second or less.

IR Hex Codes

These codes are to be programmed into 3rd party universal control systems.

	0000 006c 0000 000c 0006 011b 0006 011b 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 011b 0006 08a4
	0000 006c 0000 000c 0006 011b 0006 011b 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 011b 0006 011b 0006 08a4
	0000 006c 0000 000c 0006 011b 0006 011b 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 00bb 0006 011b 0006 00bb 0006 08a4

POWER & CONTROLS

3rd Party Dry Contact Control (Optional)

Fontus is included for Dry Contact functionality.



You cannot use IR and Dry Contact at the same time.



Scan the QR code to access the Fontus Motor Control Instructions, #400146.



Connect pin 3 to pin 4 (ground)



Connect pin 3 and pin 6 to pin 4 (ground)



Connect pin 6 to pin 4 (ground)

CAT 5	Orange/ White	Orange	Green/ White	Blue	Blue/ White	Green	Brown/ White	Brown
Wall Switch	1. Empty	2. Empty	3. Up	4. Ground	5. 5V	6. Down	7. Empty	8. Empty

RJ45 to RJ11	1. Empty	2. Empty	3. Yellow	4. Green	5. Red	6. Black	7. Empty	8. Empty
Wall Switch	1. Empty	2. Empty	3. Up	4. Ground	5. 5V	6. Down	7. Empty	8. Empty

POWER & CONTROLS

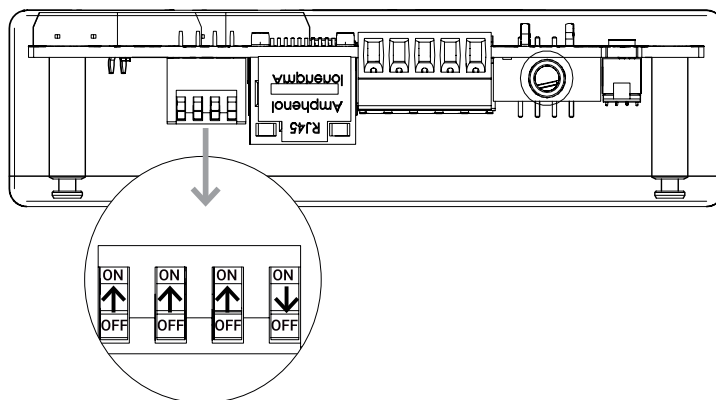
Moab General Operation

2

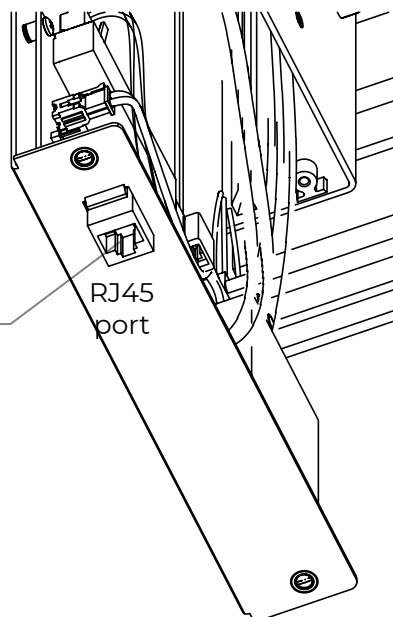
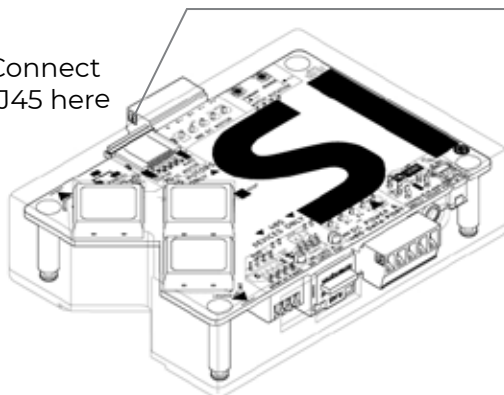
For General operation using Moab, you will need to be in User mode and plugged into the external RJ45 port.



Setting the upper limit incorrectly could damage your screen. Contact Screen Innovations if you need to adjust the upper limit.



Connect
RJ45 here



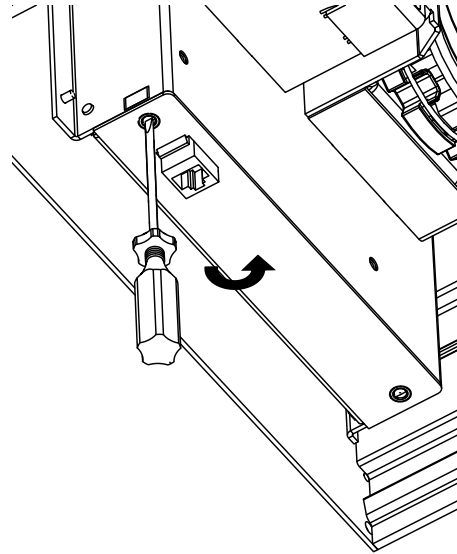
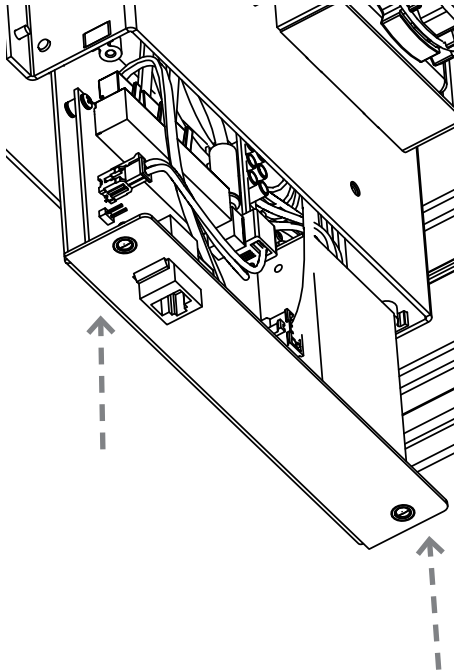
POWER & CONTROLS

4

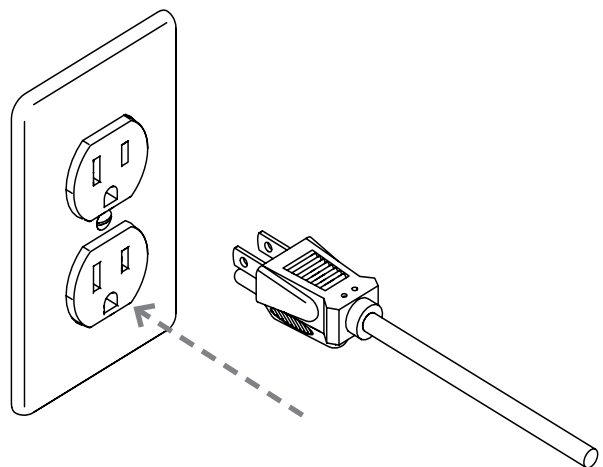
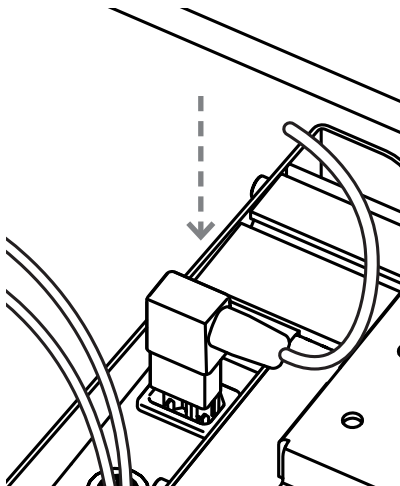
Close the Control Panel. Carefully push up the control center back into the tray ensuring the cables or motherboard are not damaged. Tighten panel fastening screws.



Do not force the control panel. If it does not close easily, reopen the panel and look for wires or other obstructions and then attempt to close it again.



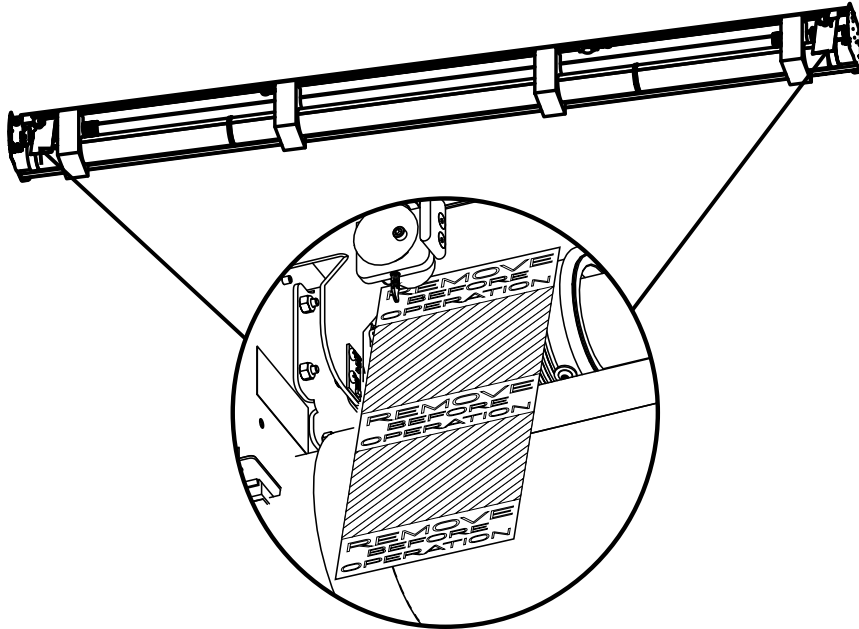
Plug in the power cable to the case and then to a receptacle. Turn on the main breaker to power screen.



SETTING THE DROP FOR VIEWING HEIGHT

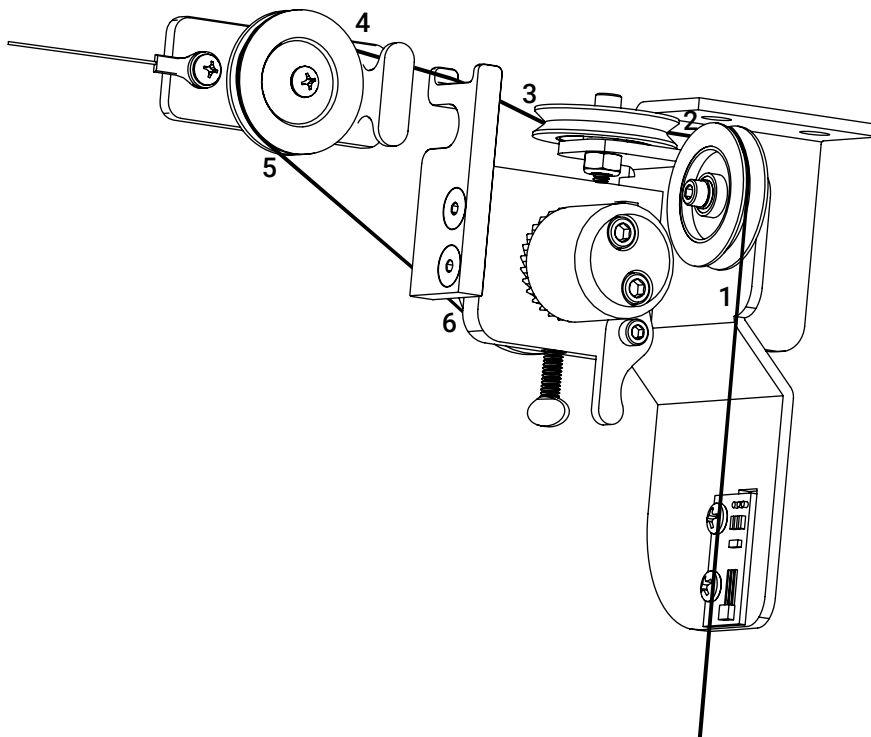
1

Remove the stickers labeled "REMOVE BEFORE OPERATING" that secure the cables to the helix inside the case, leave the remaining foam in place. It will lower with the screen and be easy to remove later. Ensure dynamma is on helix and all pulleys.



2

If the cable becomes loose, make sure the it is still set correctly on all pulleys as shown.



SETTING THE DROP FOR VIEWING HEIGHT

3

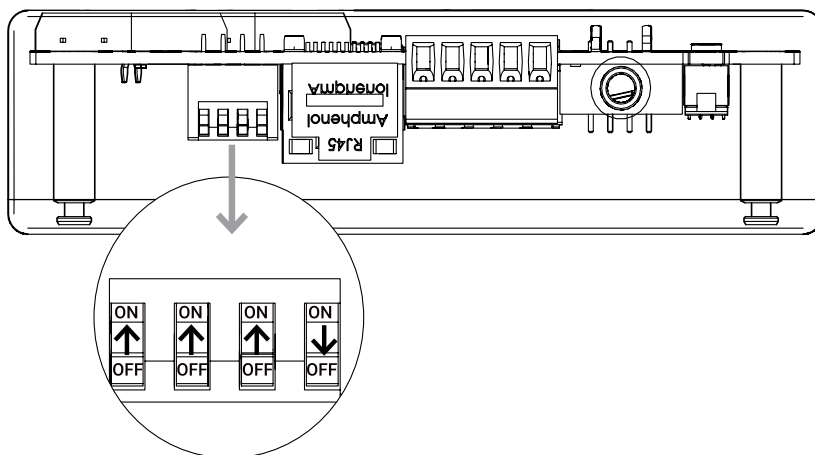
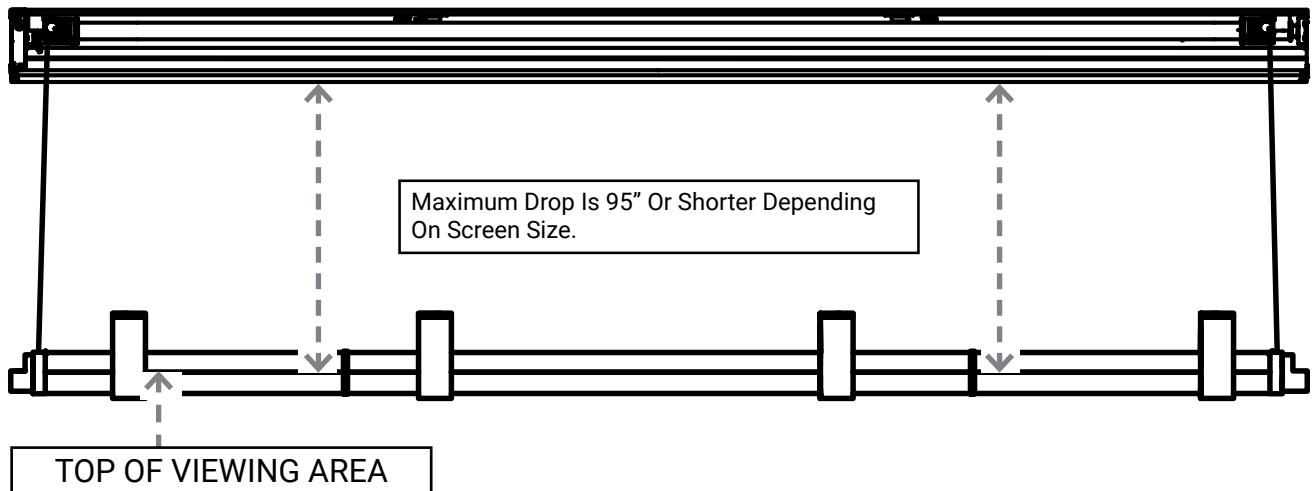
While using Moab in User mode, press the DOWN button, and once the screen reaches the desired drop, press the STOP button. The top of the viewing area is indicated on the protective tube. Remove any packing foam remaining inside the case that did not lower with the screen.



Max drop is 95" or shorter depending on screen size.



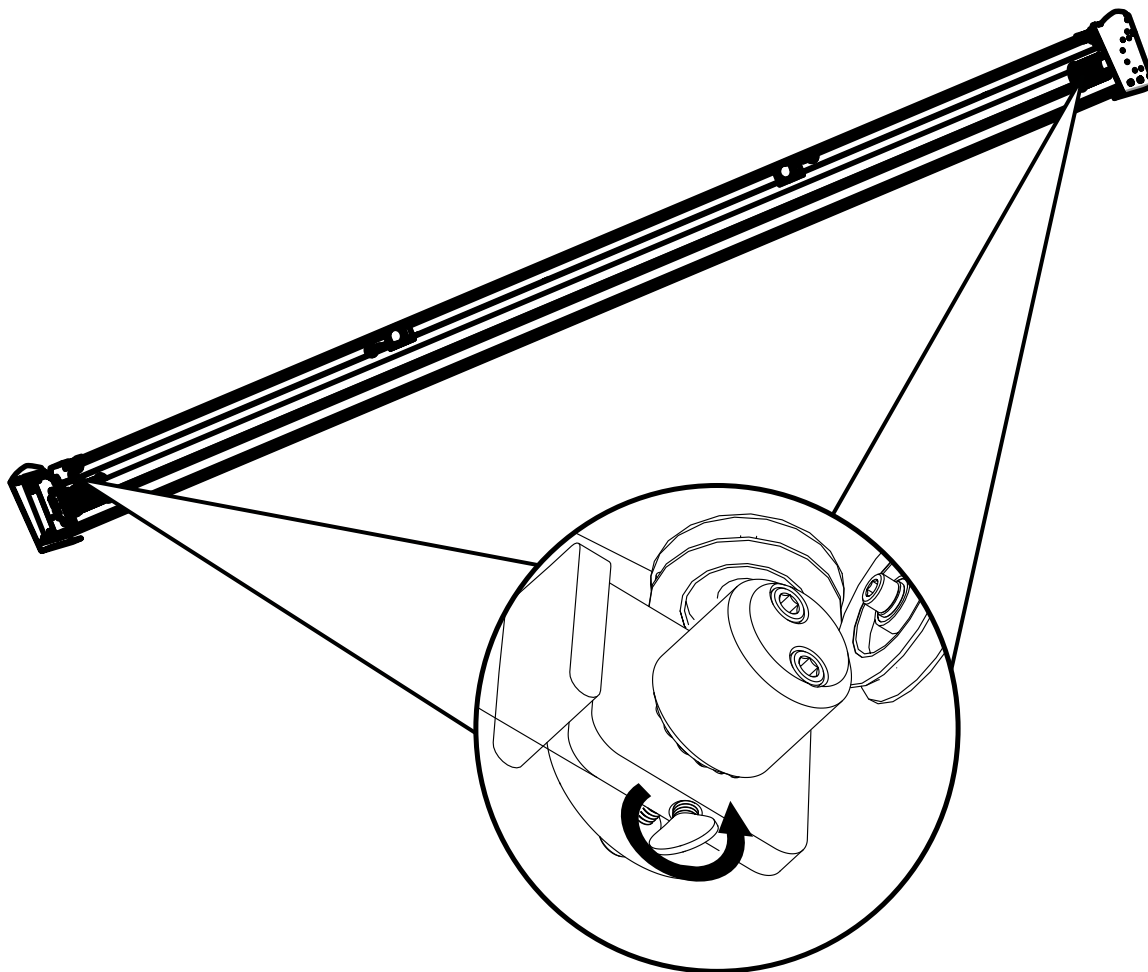
The motor is thermally protected. If the motor stops running during setup, let it cool down for at least 30 minutes before attempting to run it again.



SETTING THE DROP FOR VIEWING HEIGHT

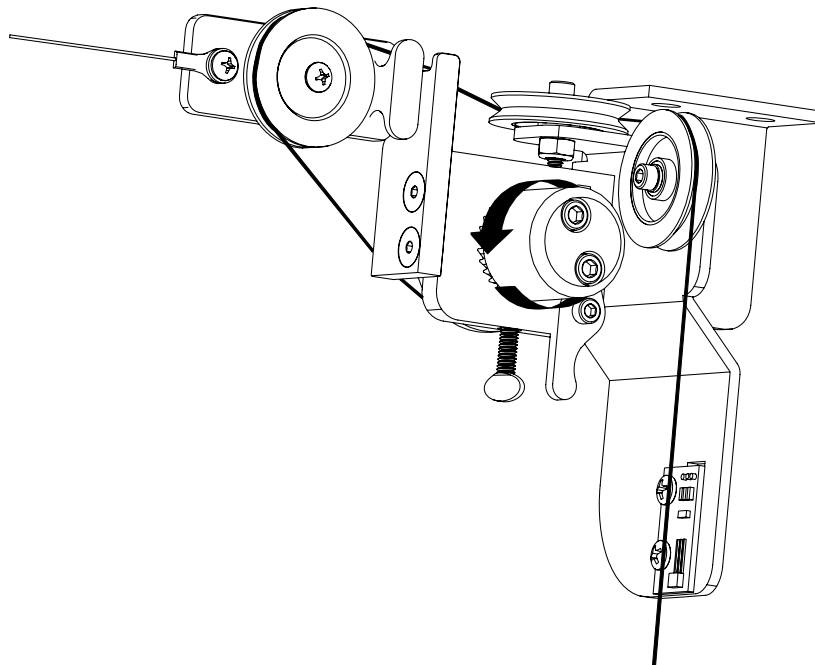
4

Perform Steps 4 through 6 on both ends of the screen.

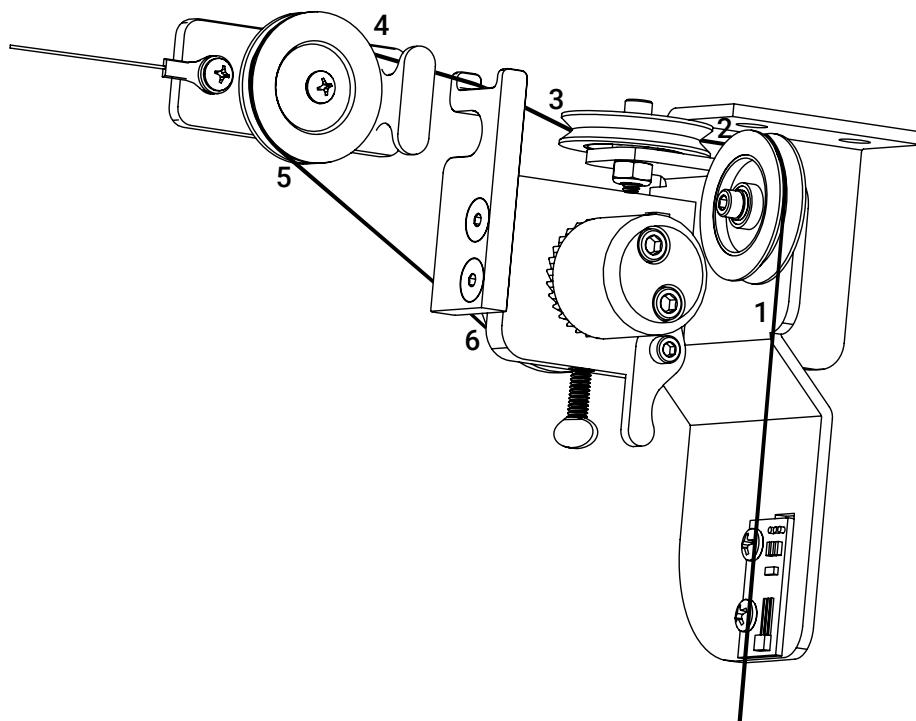


SETTING THE DROP FOR VIEWING HEIGHT

- 5** Turn the knob until the moving pulleys are firmly pressed against the stopping plate.



If the cable becomes loose, make sure the it is still set correctly on all pulleys as shown. Follow the numbers to indicate where the cables are to be routed if they come off of the pulley grooves.



SETTING THE DROP FOR VIEWING HEIGHT

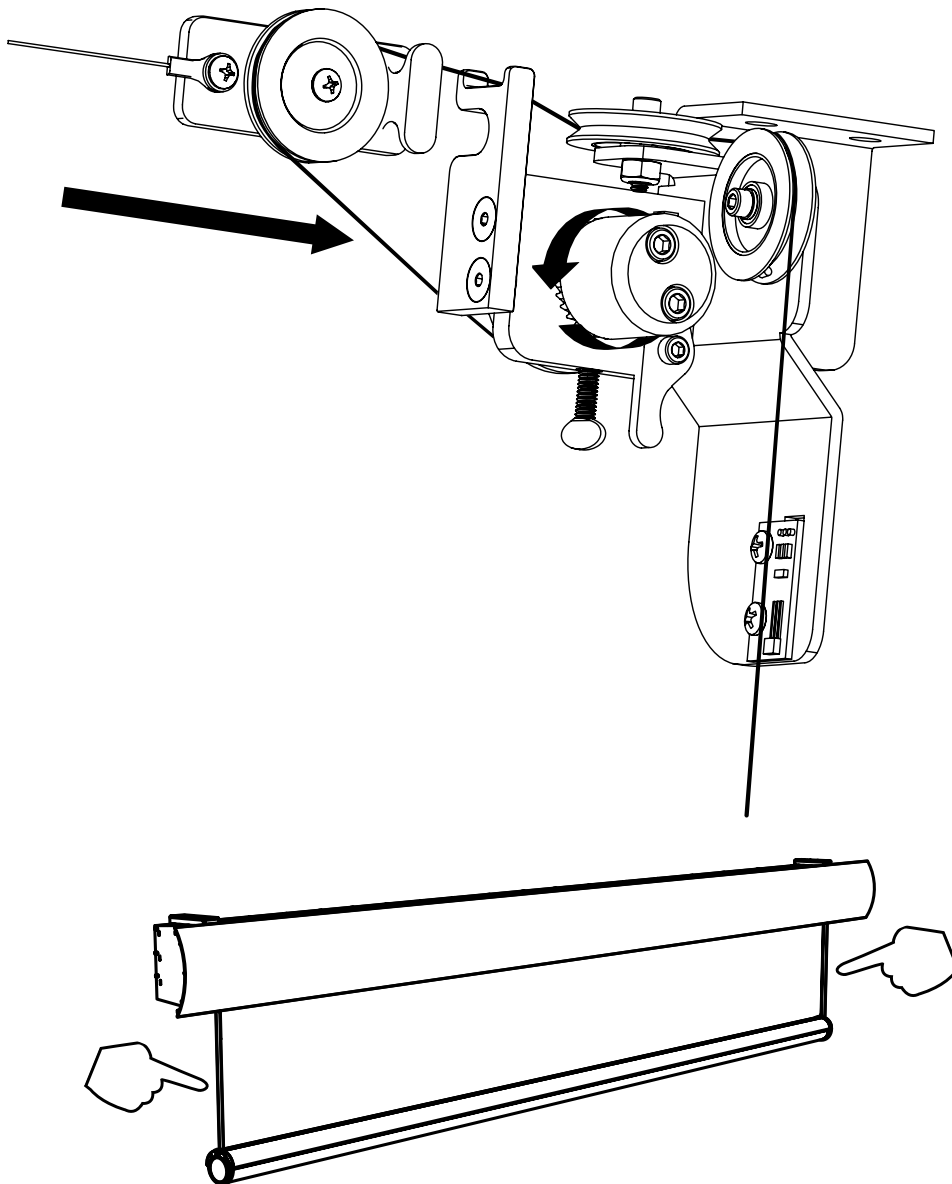
- 6** Both the wing cables should have tension on them. Tighten the thumb screw firmly to secure the wing drop setting. Perform Steps 4 through 6 on both ends of the screen. The wing pulleys should not engage with the stopping plate if you need extended drop.



Make sure there is even tension on each wing cable. This will help the drop to be set level to the case on the first try.

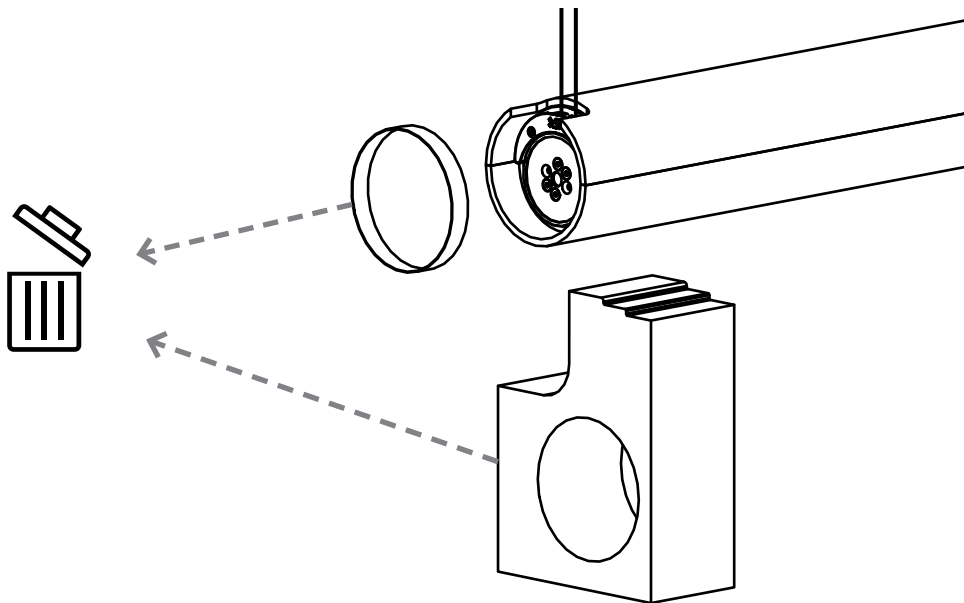


Thumb screw must be firmly tightened to prevent the drop setting from changing.

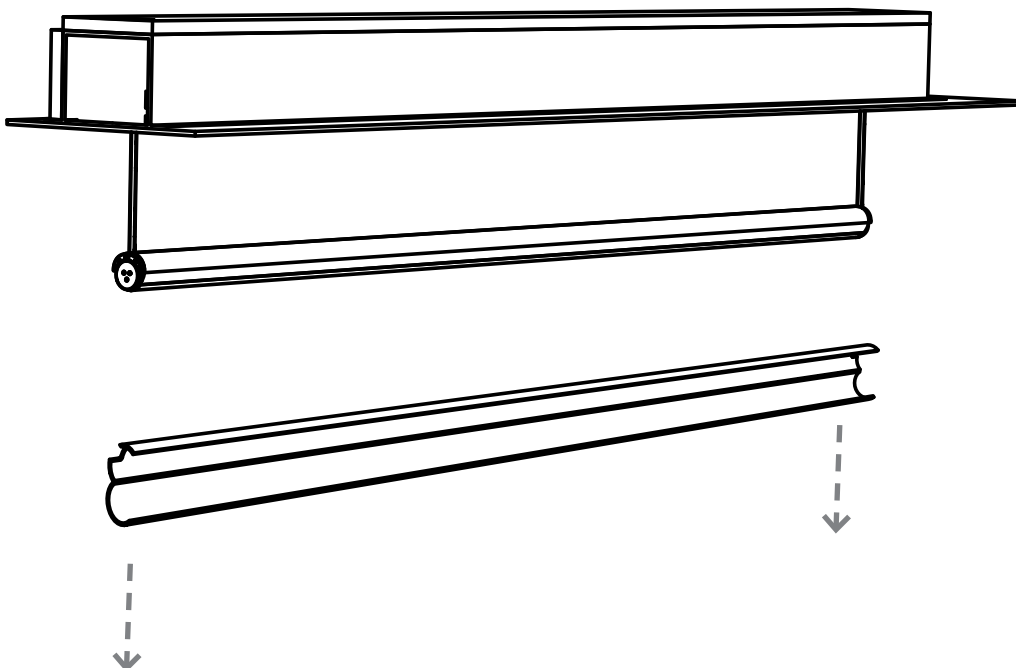


REMOVE THE PACKAGING

- 1 Dispose of all rubber bands, velcro, and foam.

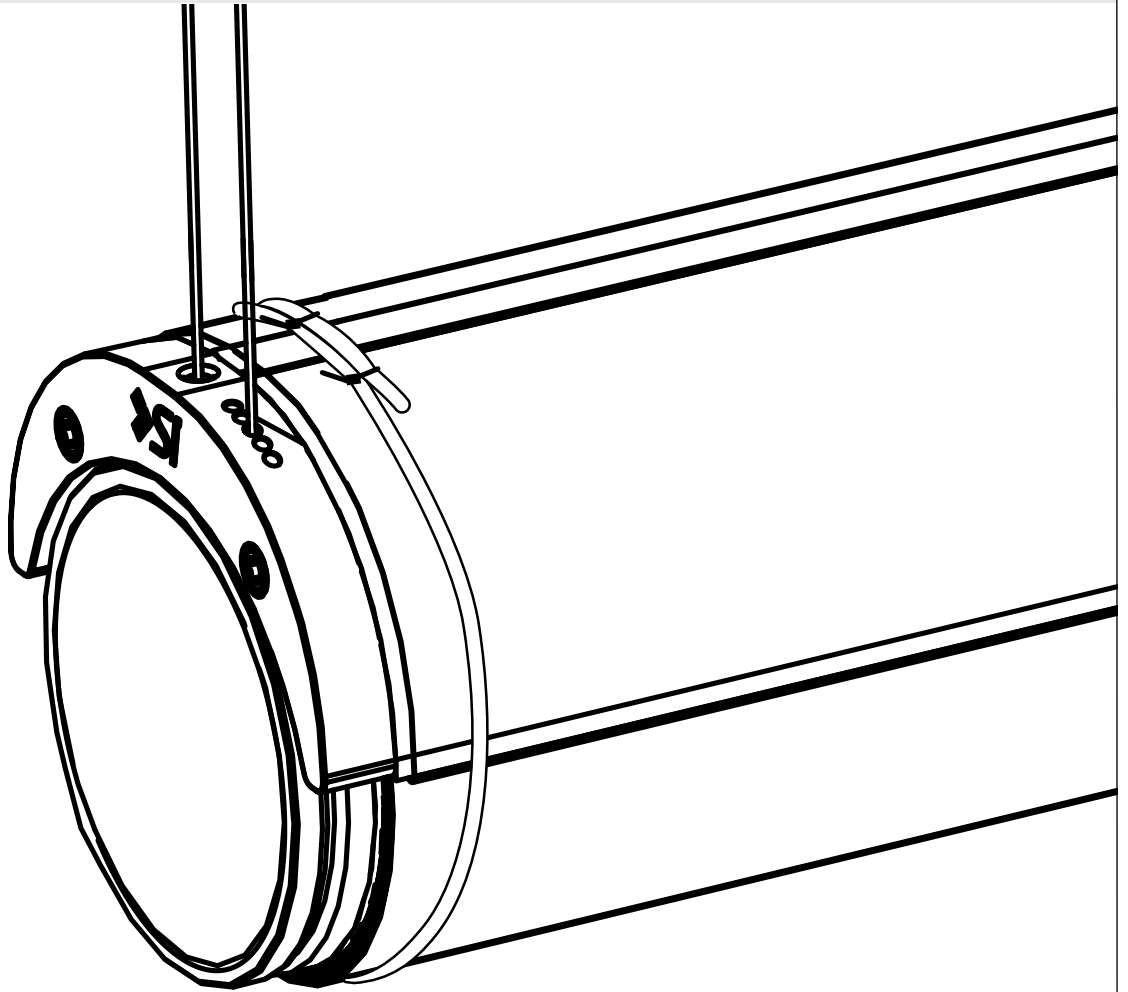


- 2 Carefully remove protective tube and foam wrapped around screen inside protective tube making sure to not damage the screen.



REMOVE THE PACKAGING

- 3 Carefully remove rubber ring without damaging the screen material.



SETTING THE LOWER LIMIT

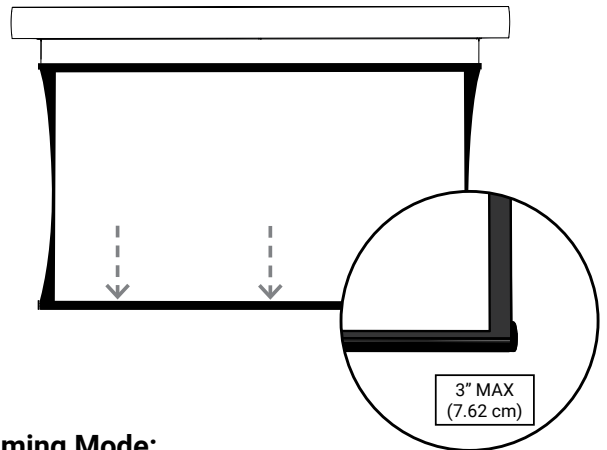
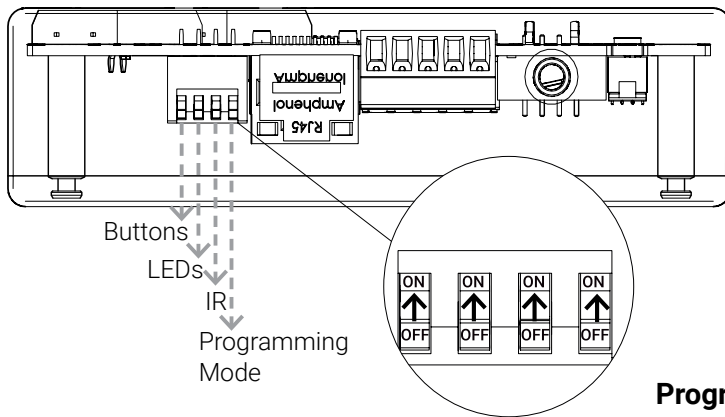
1

Upper limit is pre-set at the Factory, if the upper limit requires adjustment, please contact SI support for further assistance. To set the lower limit, make sure the MOAB is in programming mode. Hold the DOWN button on the MOAB until the viewing area is fully visible with no more than 3" of backer showing at the bottom then release the DOWN button to stop.

To prevent damaging your Zero G, the UP button has been disabled while the MOAB is in programming mode. If you go past your desired lower limit location, simply place the MOAB into User mode, press the up button to go above where you want your limit to be. Put the MOAB back into programming mode, and press the DOWN button to go to your desired lower limit.

To save the limit, hold the green STOP and blue DOWN buttons until the LEDs flash, then let go.

Basic Programming

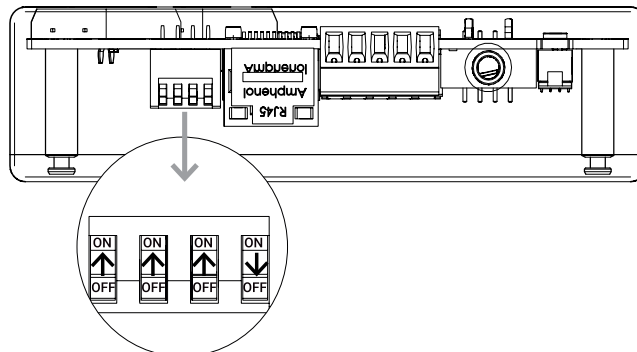


Programming Mode:

- **ON:** Places board in Programming Mode
- **OFF:** Places board in User Mode

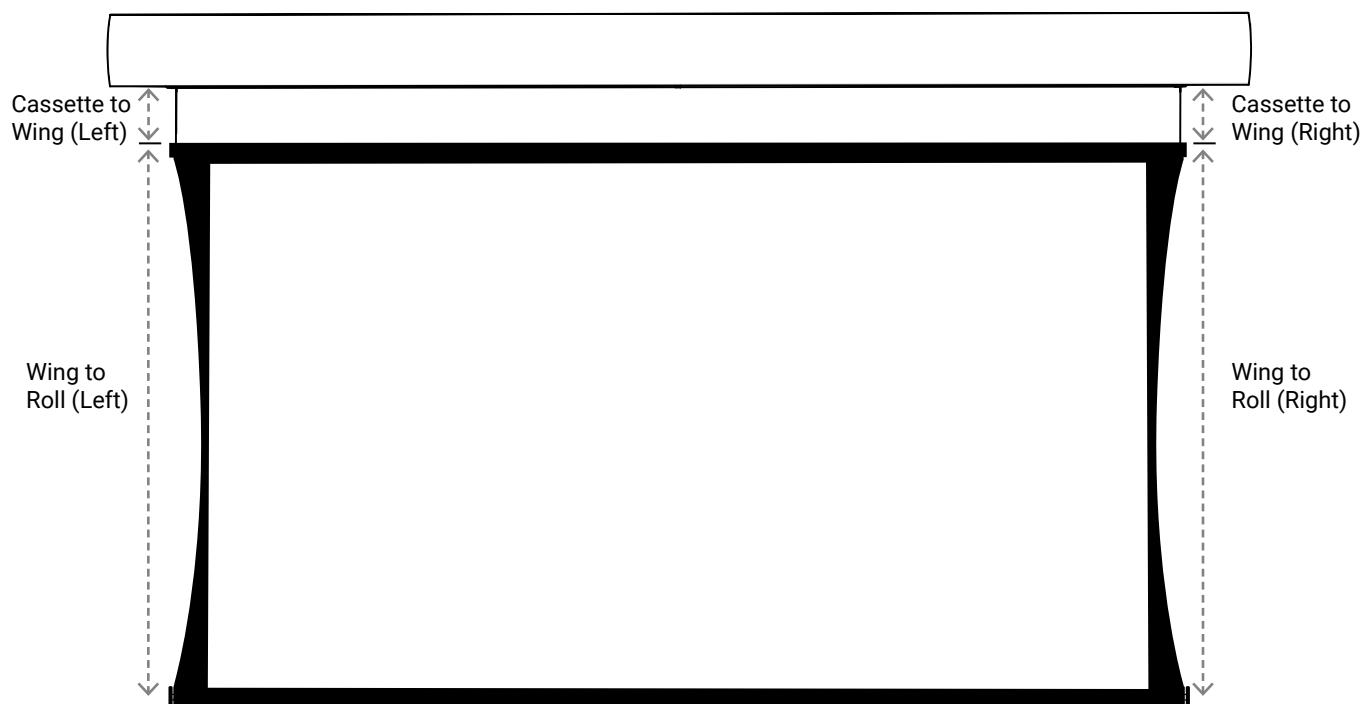
2

Put the MOAB into User mode for normal operation



ADJUSTING THE WING TO LEVEL

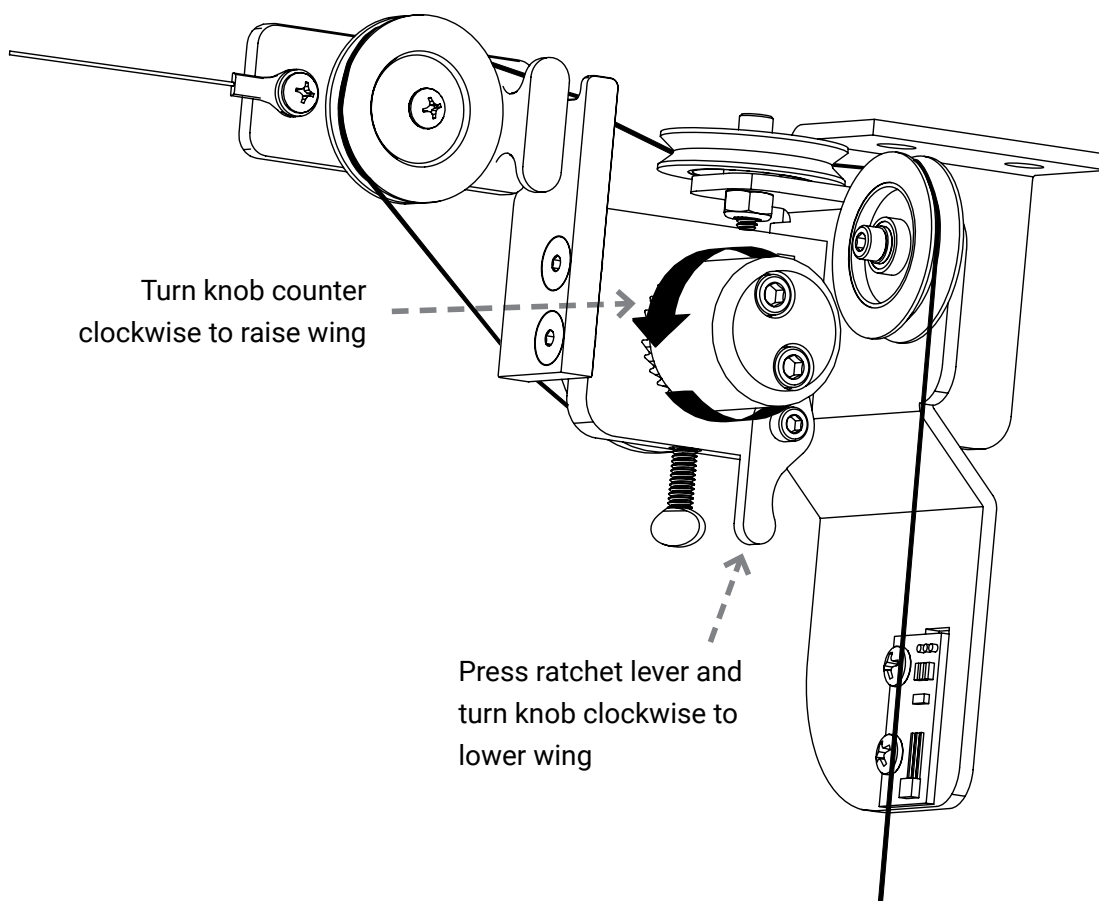
- 1 Measure from the **cassette to the wing** on both sides and check to make sure they are equal to within $1/16"$. Also measure from the **top of the wing to the roll**, on both side. Make sure they are equal too. Then the screen should be cycled a few times, and these measurement should be taken again.



ADJUSTING THE WING TO LEVEL

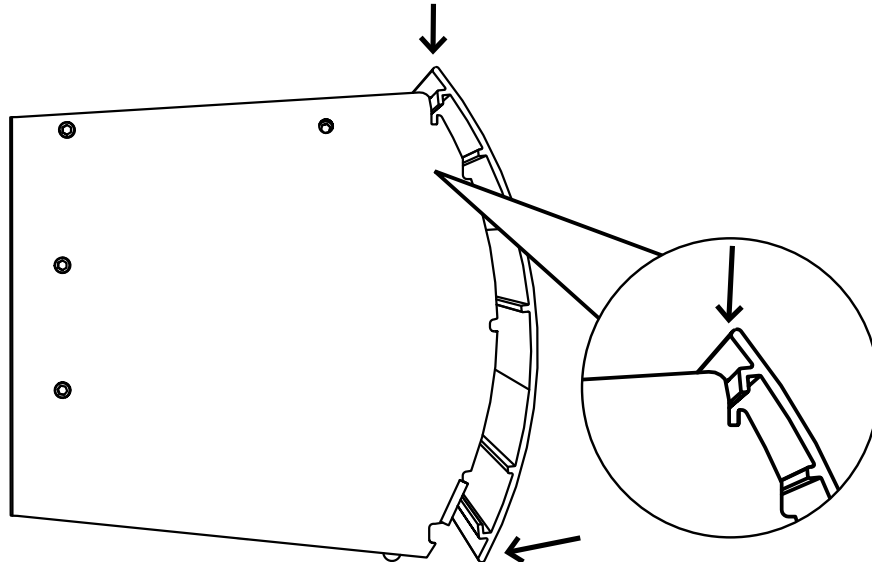
2

Loosen the thumb screw on the side that needs to be adjusted to level out the wing. Then turn the knob counter clockwise one click at a time to raise the wing. Or to lower the wing hold the lever on the ratchet and turn knob clockwise. When the wing is level tighten the thumb screw back up.

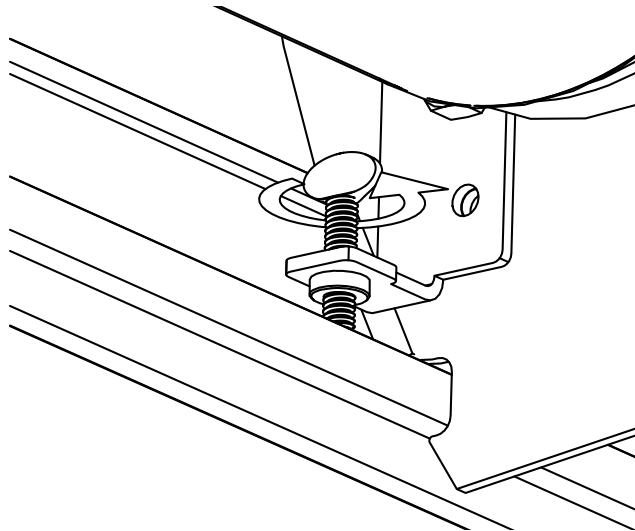


ATTACHING THE FASCIA

- 1 Lift the fascia up onto the case and make sure that the hook at the top engages the slot on the end plate.



- 2 Lock the fascia in place on each side by tightening the thumb screw at each end of the case.



If you are happy with the viewing area height then your installation is complete.
If not, see the following pages to adjust the drop.

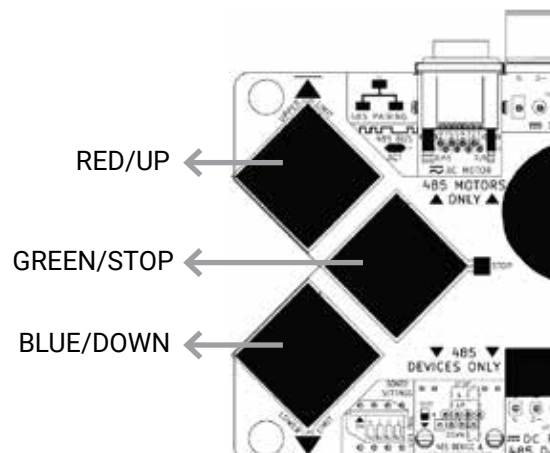
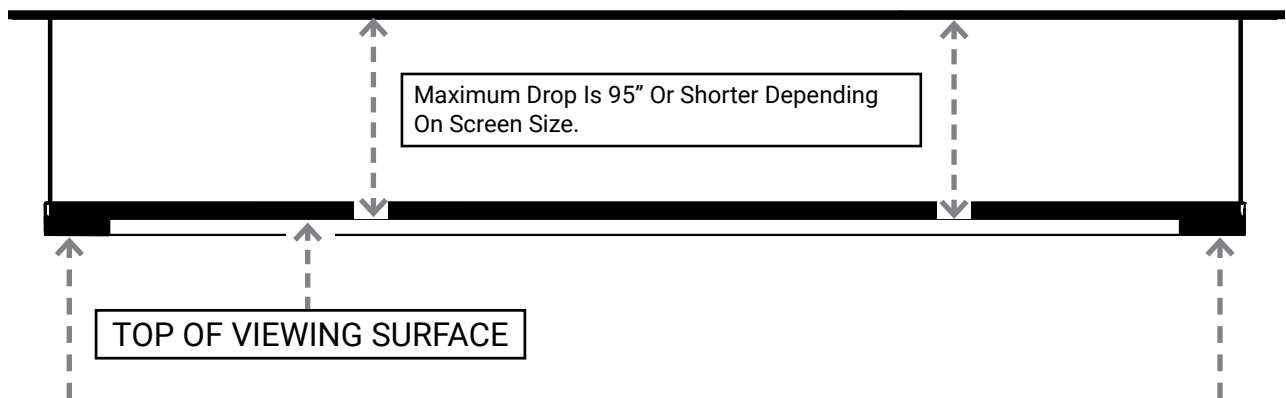
RAISING THE VIEWING AREA (IF NECESSARY)

1

While the Moab is in User mode, press the UP button, to raise the screen to the desired viewing height. Press the STOP button when the top of the viewing area is at the desired position.

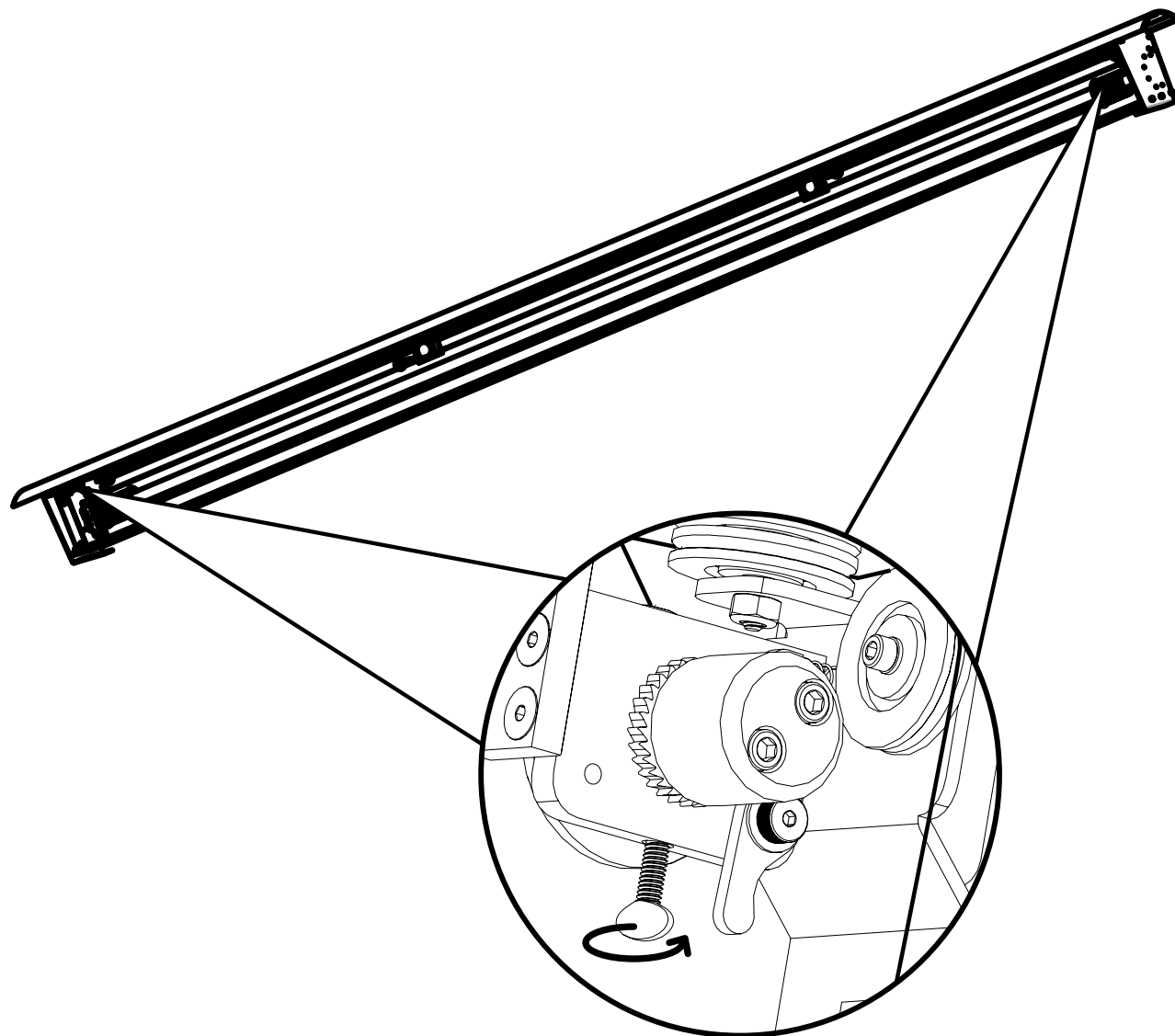


The motor is thermally protected. If the motor stops running during setup, let it cool down for at least 30 minutes before attempting to run it again.



RAISING THE VIEWING AREA (IF NECESSARY)

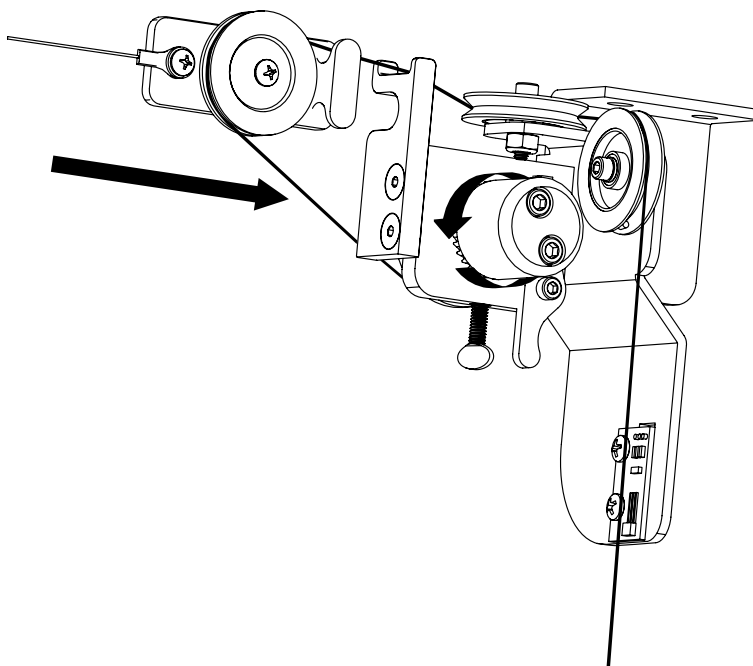
- 2 Loosen the thumb screw connected to the wing cable spool.



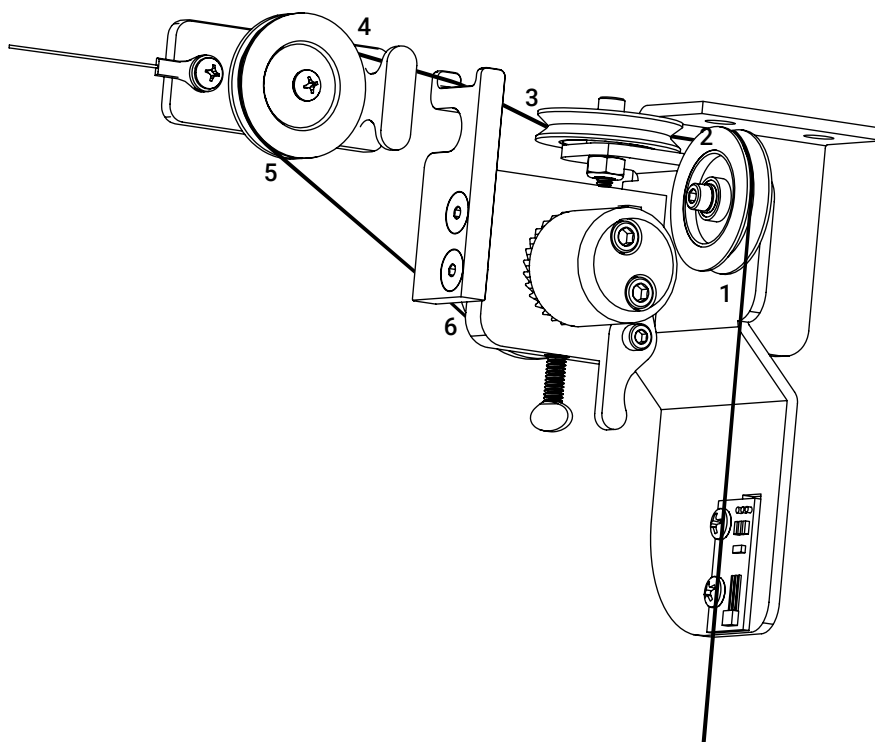
RAISING THE VIEWING AREA (IF NECESSARY)

3

Turn the knob until the moving pulley is firmly pressed against the stopping plate.



If the cable becomes loose, make sure it is still set correctly on all pulleys as shown.



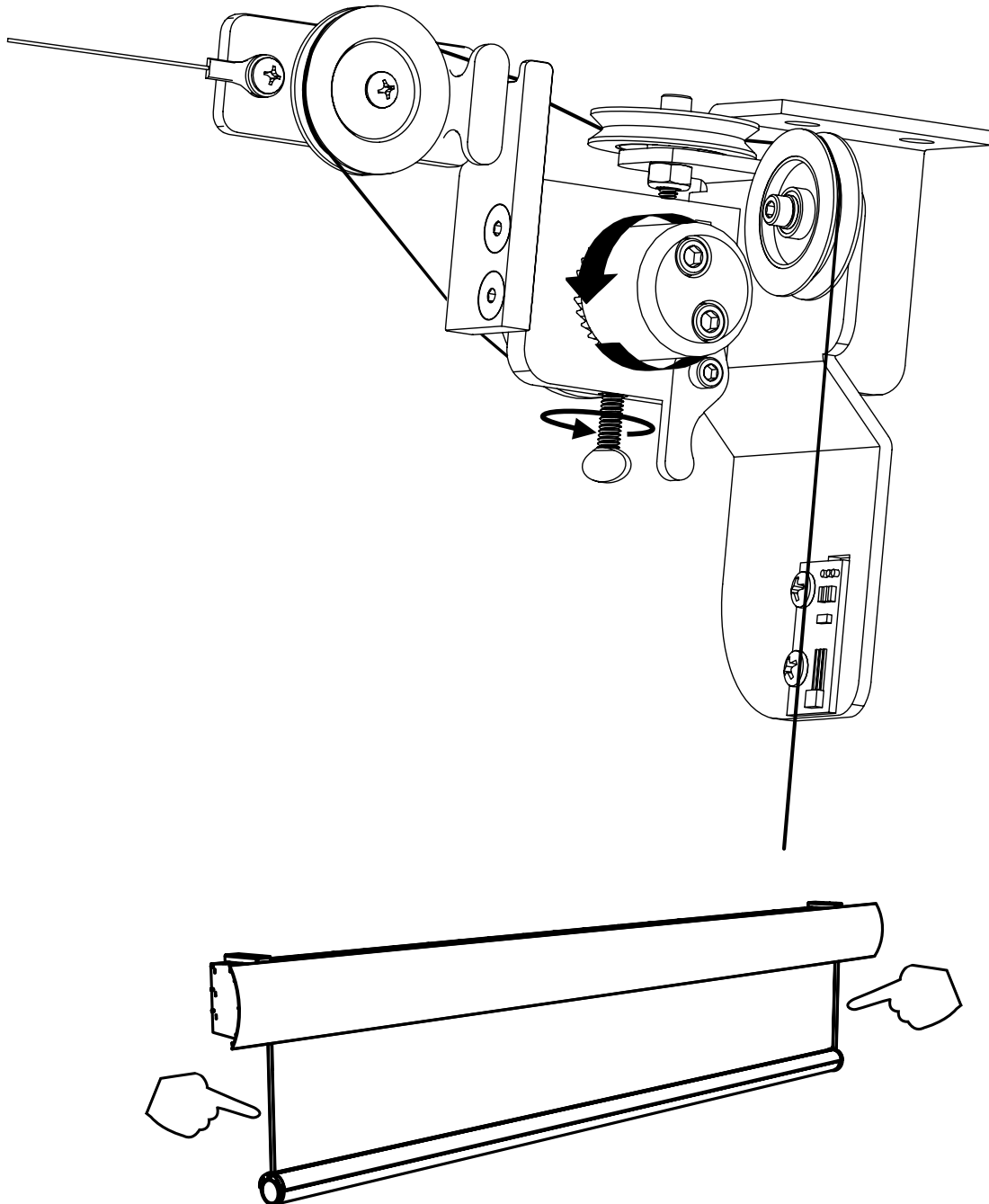
RAISING THE VIEWING AREA (IF NECESSARY)

4

Make sure the wing cables both have tension on them. Tighten the thumb screw firmly to secure the wing drop setting. Perform steps 2 through 4 on both ends of the screen.



Thumb screw must be firmly tightened to prevent the drop setting from changing.



LOWERING THE VIEWING AREA (IF NECESSARY)

1

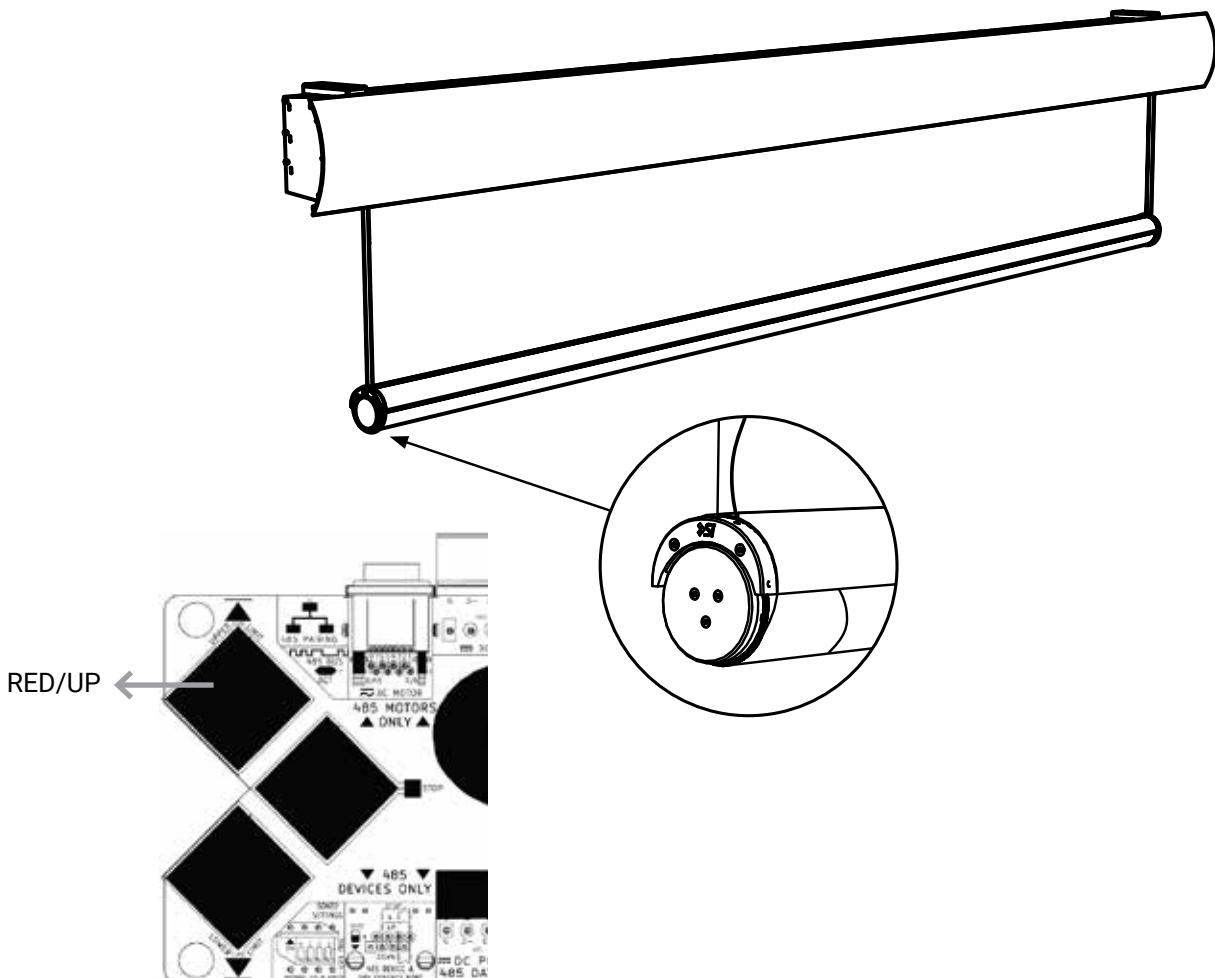
While using Moab in User mode, press the UP button to raise until it is nested in the wing, and tension has been taken off of the wing cable, then press the STOP button.



Do not exceed the maximum drop of 95-inches or shorter depending on your screen size.



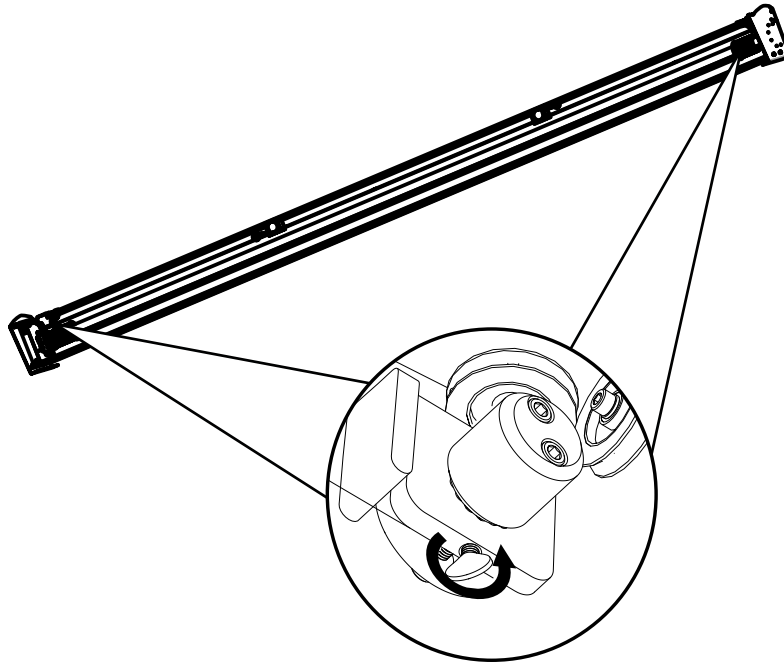
The motor is thermally protected. If the motor stops running during setup, let it cool down for at least 30 minutes before attempting to run it again.



LOWERING THE VIEWING AREA (IF NECESSARY)

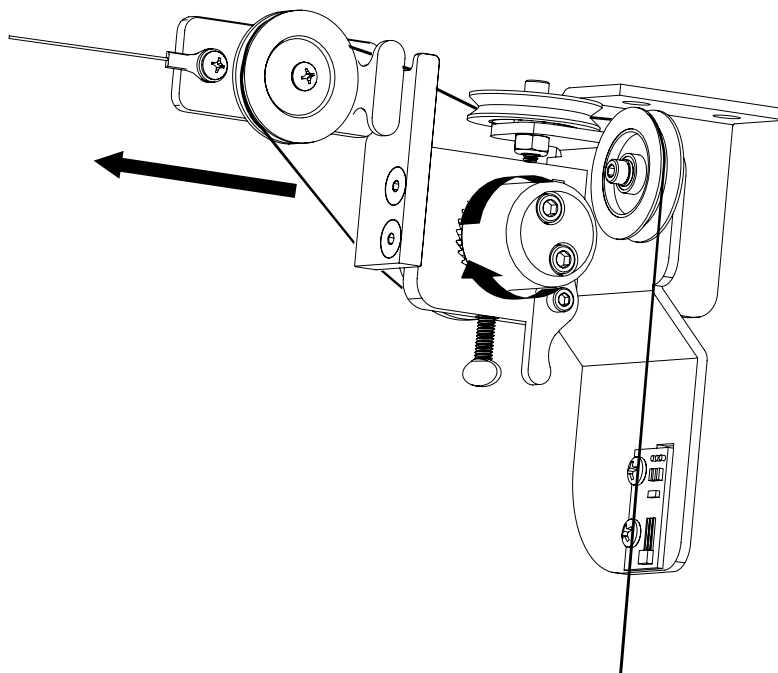
2

Loosen the thumb screw connected to the wing cable spool.



3

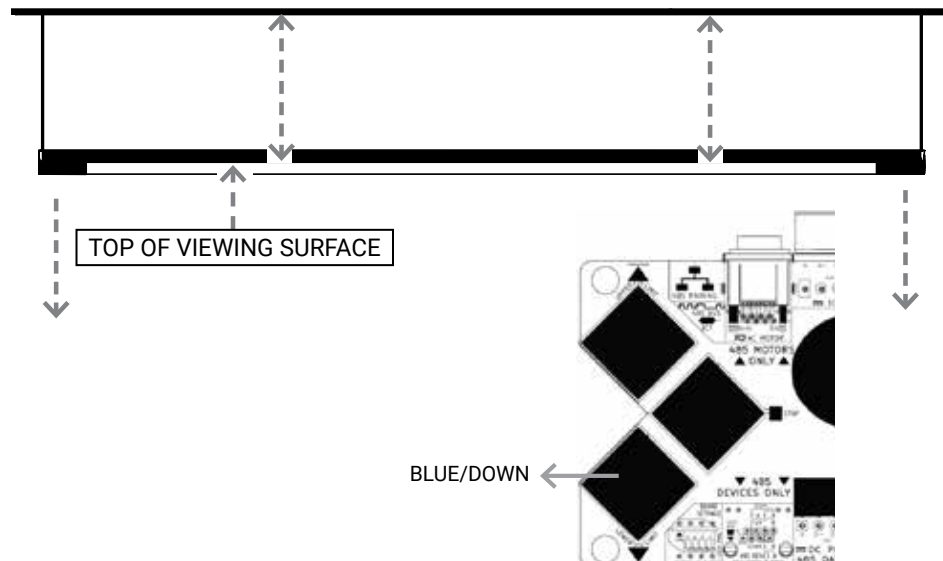
Turn the knob to allow the pulley to move away from the stopping block. Make sure to unwind more cable than you will need to lower the screen to the desired drop. **Perform steps 2 through 6 on both ends of the screen.**



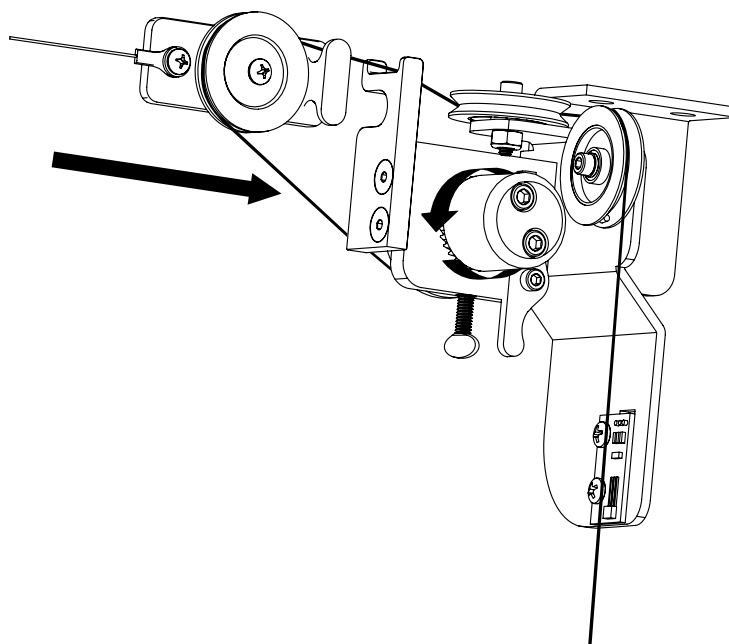
LOWERING THE VIEWING AREA (IF NECESSARY)

- 4 Press the DOWN button on the Moab until the top of the viewing area is at the desired viewing height, then hit the STOP button.

 If your screen begins to open on either side before your desired viewing height, go back to Step 2 on page 31 and release more wing cable.



- 5 Turn the knob until the moving pulley is firmly pressed against the stopping plate.

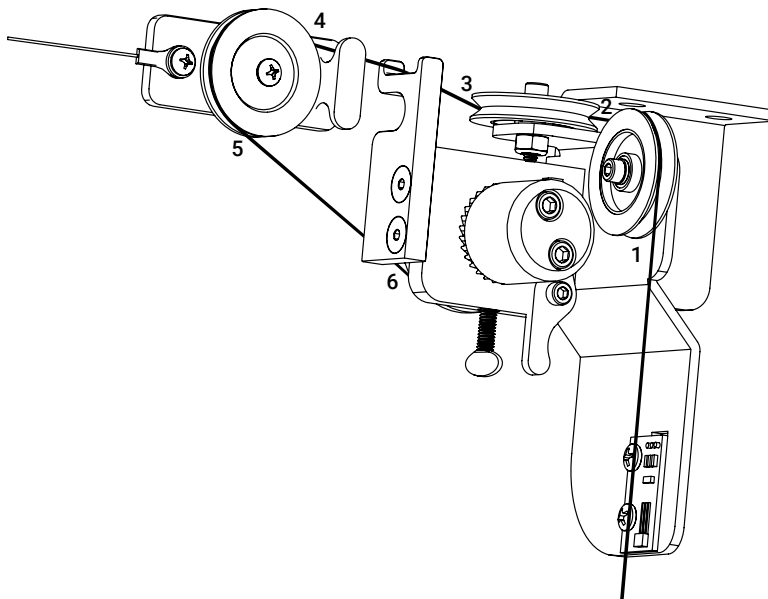


LOWERING THE VIEWING AREA (IF NECESSARY)

- 6** If cable becomes loose make sure the it is still set correctly on all pulleys as shown.



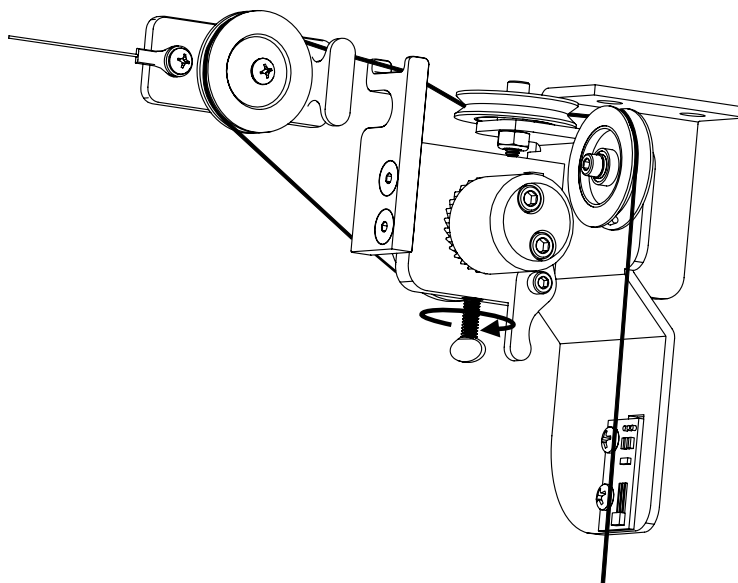
Thumb screw must be firmly tightened to prevent the drop setting from changing.



Make sure the wing cables both have tension on them. Tighten the thumb screw firmly to secure the wing drop setting.



To reset lower limit turn to Pg 26



SCREEN MATERIAL CLEANING INSTRUCTIONS



Never use abrasive scrub pads, oil-based solvents, or concentrated detergents to clean screen material. Always test cleaning solutions in a small inconspicuous area to check for compatibility. "Soapy water" is a dilute solution of clean water (preferably distilled) and a mild dish washing detergent.

Maestro White / Grey

Remove light dust by using a bristled attachment with a vacuum cleaner, or compressed air. Light stains can be removed with a microfiber towel and soapy water, or with a clean white pencil eraser.

Slate/Pure / 360 / Backstage

Gently wipe screen material using a microfiber towel and distilled water. Do not scrub the material excessively. For stains or smudges, use a microfiber towel with a diluted degreaser solution (1:20 dilution recommended) or lukewarm soapy water.

Black Diamond

Gently wipe screen material with "Whoosh" Screen Cleaner (included with all Black Diamond screens) and a microfiber towel.

FlexGlass

Remove dust and fingerprints by using a microfiber towel with a diluted glass cleaner solution (1:10 dilution recommended) or soapy water.

TROUBLESHOOTING

Problems related to electrical or motor function may require a qualified service person or electrician. Should you have a problem that is not addressed here, call: Screen Innovations (512-832-6939.)
<http://www.screeninnovations.com/category/support/>

Problem	Probably Cause	Action to Take
Motor shuts off. Motor has been in use for more than 2 minutes.	Motor is designed for short operations (lowering and retracting), not continuous running. Longer operation, causes the motor to overheat and shutoff. This typically happens during installation when testing the screen.	Allow the motor to cool down. Complete cooling can take an hour or more. Heat gain is cumulative and takes time to dissipate. If motor use is initiated before it has cooled completely, the motor will shut down again when it reaches maximum temperature.
Dirt, fingerprints, marks, etc. on screen surface.	Improper handling of screen.	Follow the the cleaning instructions outlined in the Screen Care and Cleaning Section
Indentations appear on screen surface.	Debris or particles clinging to the screen due to static cling.	Check both sides of the screen for dust or debris. Wipe the back of the screen with a clean damp cloth. Also, lightly brush off the front of the screen.
Screen won't operate.	No AC power available.	Check to see if the circuit breaker has switched off. Reset if needed. Check outboard switching apparatus. Check voltage availability. Contact an electrician.



Please use this QR Code to access the updated installation instructions and related documents.

Technical Support: 512.832.6939

Hours of Support: 7:30am - 5pm CST

screeninnovations.com

support@screeninnovations.com



Screen Innovations

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